

COMMITTEE WORKSHOP

CALIFORNIA ENERGY RESOURCES CONSERVATION

AND DEVELOPMENT COMMISSION

In the Matter of:)
)
Strategic Fuel Reserve and)
Alternatives to Dampen Price)
Volatility)
)

CALIFORNIA ENERGY COMMISSION

1516 NINTH STREET

HEARING ROOM A

SACRAMENTO, CALIFORNIA

THURSDAY, APRIL 24, 2003

9:18 A.M.

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John Geesman, Commissioner

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Chris Kavalec

Seymour Goldstone

Daryl Metz

Leigh Stamets

ALSO PRESENT

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Gregg Haggquist, President & CEO
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Robert Lanza, Principal Chemical Engineer
ICF Consulting

Mariella Cacho, Associate
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ALSO PRESENT

David Hackett, President
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PUBLIC COMMENT

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I N D E X

	Page
Proceedings	1
Opening Remarks	1
Presiding Member Boyd	1
Commissioner John Geesman	7
Contract Reports	
Government Use of the California Gasoline Forward Market	7
Presentation	7
Discussion	47
Permit Streamlining for Petroleum Product Storage	56
Presentation	56
Discussion	105
Afternoon Session	132
California Marine Petroleum Infrastructure	132
Presentation	132
Discussion	165
California Strategic Fuels Reserve	192
Presentation	192
Discussion	266
Public Comments	320
Closing Remarks	333
Adjournment	335
Certificate of Reporter	336

1 P R O C E E D I N G S

2 9:18 a.m.

3 PRESIDING MEMBER BOYD: I think we're
4 finally ready. As you've noticed here, we
5 commissioners have no power and the people wiring
6 the room have been in charge the last fifteen
7 minutes. Pardon the delay while they rewire the
8 microphone system for whatever reasons, but I
9 think we are ready to finally get underway.

10 I want to welcome you to this workshop.
11 First, I want to take care of a few housekeeping
12 items, and then I and Commissioner Geesman have a
13 few introductory words before we get into the
14 agenda.

15 Housekeeping items. This workshop is
16 meant to be fairly informal, we've tried to level
17 the playing field and sit down here on one level
18 with the rest of you. This is a workshop, not a
19 formal committee hearing, it is a committee
20 workshop on this very important topic. Throughout
21 the day we encourage questions and dialogue and
22 what have you at the end of a presentation.

23 This is being audio cast on the
24 Commission's website, so there are people out
25 there listening to this. At least I hope they

1 are. We went to a lot of trouble to accommodate
2 them. To those listening in and for everyone
3 else's information, the notice, the lengthy notice
4 we put out on this workshop went to great lengths
5 to explain the various website locations of the
6 materials that were produced for this workshop.

7 I am told that some of the power point
8 presentations that we will be seeing here today
9 are being posted to the website literally as we
10 speak. I was just given a box score of two are up
11 and three to go, but anyone listening and
12 monitoring the website, in short order, the
13 presentations that many of us have yet to see will
14 be posted on the website.

15 I would like to request speakers to
16 identify themselves, their name, their
17 organization when they do speak, and I would ask
18 that anyone who does speak throughout the course
19 of the day provide a business card to our recorder
20 down here just for information in compiling the
21 record. Any folks from the media that are here,
22 there are media representatives from our
23 organization in the back, and they ask you to
24 please sign in with them so you all get to know
25 each other. With that, I think I have covered all

1 the housekeeping items.

2 My name is Jim Boyd, I'm a Commissioner,
3 in spite of the anonymity here in front of me, and
4 I don't deserve a nameplate apparently. I'm
5 joined by Commissioner Geesman, who is the other
6 member of our Transportation Committee.

7 I'd just like to make a few remarks to
8 try to set the stage for this. This is certainly
9 not a new topic, and I would like to say we have a
10 period of time at the end of the day for public
11 comments, and anyone who wants to comment in that
12 time slot per our agenda. I ask you to find one
13 of these blue cards around on the work table in
14 the back of the room and fill it out, and see that
15 it gets up to the table so we know to call on you.
16 Although, frankly, I'll just throw the floor open
17 eventually, but we would still like to know --
18 have an idea of how many speakers we might have.

19 With that, as indicated in our workshop
20 notice that obviously all of you have had access
21 to, the purpose of today's workshop is to talk
22 about the strategic fuel reserve and alternatives
23 there to.

24 The workshop is in response to the
25 Commission's responsibilities under Chapter 936

1 Statutes of 2000, more popularly known as AB2076
2 by then Assemblyman Shelly, which requires this
3 Commission to examine the feasibility of operating
4 a strategic fuel reserve to dampen fuel price
5 volatility, seen as the culprit in the 1999 price
6 spikes which led to an Attorney General's
7 investigation and ultimately to the legislation
8 that we are talking about today.

9 Well, deja vu all over again, as
10 indicated by a famous pundit once. Fuel price
11 volatility and price spikes are of much concern
12 once again to Californians, and although gasoline
13 prices are starting to decline now, we've had a
14 substantial fuel price increase in this state in
15 the last several months, if not in the nation, but
16 certainly in this state.

17 As noted in our March 28 report to the
18 governor, the statewide average retail price of
19 regular gasoline jumped 36 percent, climbing from
20 \$1.58 a gallon average on January 1 to a record
21 setting \$2.15 a gallon on March 17. Frankly, I
22 saw prices higher than that, but in any event, an
23 increase of some \$.57.

24 This committee held a workshop on March
25 13, 2002 a little more than a year ago to discuss

1 the initial results of a study performed for us by
2 Stillwater Associates on the subject of the
3 feasibility of operating a strategic fuel reserve.

4 Following that workshop, this committee
5 concluded that additional information was needed
6 on SFR alternatives, and with the permission of
7 the author of the legislation, we were granted
8 more time to more thoroughly dig into the subject.

9 The Commission then initiated three
10 additional studies to examine alternatives to
11 reduce gasoline price volatility, enhance forward
12 markets, storage construction and permitting, and
13 the marine terminal infrastructure.

14 Today we are going to hear the results
15 of these three studies from the contractors.
16 We're going to take additional information on the
17 SFR analysis that was originally undertaken, and
18 then we are going to hear from any and all of you
19 of the interested and affected public with your
20 comments on what we've been presented today.

21 Tomorrow this workshop continues. We'll
22 have special presentations on items. We'll have
23 what I look forward to, a very meaningful panel
24 discussion by experts in all areas on all the
25 subjects, and more public comments on alternative

1 views on strategic fuel reserves.

2 We, the staff, did provide questions
3 that we would kind of like to get answered over
4 the course of the next couple of days. They were
5 provided to everyone, and I think they are
6 available on the back table, discussion questions
7 for workshop panel on critical issues related to
8 the SFR. We are seeking information around those
9 three general areas in the document to help us
10 make our final decision and move this issue
11 forward.

12 Before turning the microphone over to
13 Commissioner Geesman, and then moving into the
14 agenda, I would like to acknowledge all the good
15 and hard work of the staff of this organization
16 who really put a huge effort into preparing for
17 all of these subjects and these workshops. Leigh
18 Stamets, in particular put a lot of effort into
19 arranging and facilitating this. Brian Covi,
20 Ramesh Gameriwal, and Chris Kavalec, Daryl Metz,
21 Gordon Schremp, Jennifer Thompson, all of them put
22 a lot of effort into this, and we thank them very
23 much for that. With that, Commissioner Geesman,
24 I'll turn it over to you and then we can move to
25 the agenda.

1 COMMISSIONER GEESMAN: Thank you, Jim.

2 I think I'll pass on the opening remarks and
3 reserve my time for perhaps foolish questions
4 later in the day.

5 PRESIDING MEMBER BOYD: Thank you,
6 wisely said. I guess I get to be the moderator or
7 referee here according to the agenda here, so
8 right now the agenda calls for a presentation on
9 the Government Use of the California Gasoline
10 Forward Market. That's a presentation by Jeffrey
11 Williams of UC Davis and Greg Haggquist.
12 Gentlemen, are you ready?

13 DR. WILLIAMS: While all these talks are
14 somewhat separate, they connect in many ways of
15 course, and what we would like to tell you about
16 the forward market surely has some relevance for
17 this strategic fuel reserves idea, so I hope a
18 number of things will emerge in our presentation.

19 We were charged with studying the
20 forward market as it existed, but let's sort of
21 view these as two propositions that we needed to
22 investigate. The first one, I'm not saying these
23 are true with that they are just propositions, is
24 that an illiquids seller dominated forward market
25 for gasoline here in California, perhaps in

1 contrast to other places in the world, will
2 discourage storage. There is no incentive to keep
3 inventories and consequently price spikes might be
4 higher. It will also discourage imports from
5 coming in and so on.

6 If that's true, perhaps the State of
7 California by consolidating its own purchasing
8 approaches, which are fairly fragmented now, could
9 participate in the forward market and increase
10 that markets liquidity.

11 Forward markets have a feature that the
12 more liquid they are, the more traders trade in
13 them, the more liquid they become. It is a
14 virtuous circle that way or cycle, and perhaps the
15 State of California, by changing the way it
16 operates, could set in motion this process to a
17 general good.

18 This is a separate issue from whether it
19 makes sense for the State of California in and of
20 itself to think about forward purchases of
21 gasoline. We are thinking in this instance of
22 what it will do more broadly.

23 We went out and conducted something like
24 twenty stakeholder meetings, many of them had been
25 interviewed previously about the strategic fuel

1 reserves, but we asked slightly different
2 questions and tried to concentrate on what is the
3 current operating condition of the forward market.
4 It is no formal institution, people have different
5 impressions about it, and we would like to report
6 on that.

7 We also asked a lot of questions about
8 people dealing with state contracts, both some of
9 the purchasing agents within state agencies, but
10 even more the contractors dealing directly with
11 them. I'd like to show you what we got about
12 that.

13 To anticipate a bit, a lot of this is
14 going to be in this gray zone of how markets work,
15 what could be done. There aren't going to be
16 definitive answers and there may be some
17 disagreement about the implications of some of
18 this material, but nevertheless, it is worth
19 emphasizing what we've found.

20 We'll be splitting our talk. Greg
21 Haggquist here is going to talk first awhile about
22 what we've seen in the forward market, and then
23 I'm going to draw some implications. He's going
24 to come back and talk about what is the state of
25 contracting within the current system and how that

1 might change if the state went to forward markets
2 more, and then I will draw some conclusions.

3 MR. HAGGQUIST: Thank you, Dr. Williams,
4 I'm Gregg Haggquist. In this presentation, I'm
5 Monterey Global Energy. This introductory
6 presentation is, in fact, just that. It's like
7 the crane shot at the beginning of a movie, the
8 beginning of West Side Story, that old great
9 movie, looking over the market from a high point.
10 I always try to find a quote from a philosopher or
11 poet to start things off, and T. S. Elliot comes
12 to mind because I've been trading this market for
13 thirty years. He said, "Old men should be
14 explorers, and the point of all their exploration
15 should be to arrive at their starting point, but
16 to recognize it for the first time."

17 You know, a lot of us will do that when
18 we really look at this market we all trade and do
19 business in, and we say what is the price
20 formation sequence? How are prices even formed,
21 what is the sequence? Our stakeholder meetings
22 that Dr. Williams mentioned pointed out again and
23 again that the pipeline trade is what creates the
24 spot market in California. The OPIS price posted
25 every day reflects pieces, as they call them,

1 25,000 barrels, 50,000 barrels a piece of gasoline
2 traded on the pipeline, and that is by definition,
3 today's market.

4 The pipeline price then weeds the rack
5 prices. The rack is where the trucks come, pick
6 it up, and bring it out to the street, for people
7 listening in who might not have ever really
8 thought about the logistics. The pipeline price
9 causes the rack price to go up or down, and then
10 that price is usually the basis by which the truck
11 and trailer delivers to the service station sets,
12 to some degree, what the street price will be.

13 Once the price gets to the street, it
14 becomes sort of a new market, you know, new
15 dynamics take over, and the retail end of the
16 business competes with each other, often blind to
17 what is going in Iraq, the Middle East, New York
18 Harbor, crude oil, and so forth, but rather what
19 is going on in the competing gas station across
20 the street or the hyper market down the block.

21 The street part pricing is a new market
22 in sympathy with the pipeline and rack markets,
23 but dynamics are not one to one. In all of this,
24 how do we know where the market might be going.
25 We don't have a futures market as we have in New

1 York Harbor or the IEP in London, so what we do
2 have, as leading indicators of the direction of
3 the market, is the OPIS pricing for the prompt,
4 today's price and the forward price, and we have
5 the dynamics of the pipeline scheduling. We call
6 it as a leading indicator.

7 Anyone listening in or in here in the
8 room who has worked in scheduling a pipeline knows
9 that pressure's built up either to move barrels
10 when you are long and there's no one to buy them,
11 or to buy barrels if you have to cover a schedule
12 that you are short of covering, and then you have
13 to go into the market and buy. When that happens,
14 you may get squeezed.

15 You may have to pay five, ten, fifteen
16 cents higher than the price was yesterday. That,
17 by definition, sets the new price for tomorrow.

18 The famous terms in all forward markets
19 are backwardation and contango. Contango always
20 sounds like a dance, doesn't it?

21 Backwardation contango set up their
22 rewards and their punishments for holding
23 inventory. This is a drastic way to say, but in
24 fact, if the market is in contango, which means
25 the price next month or next week will be higher

1 than it is today, then you will be rewarded. If
2 you squirrel away a little inventory, put
3 something into a tank and hold it because you are
4 going to get more for it next month, if you can
5 cover the cost of your storage and the cost of
6 money. That is just common sense.

7 Backwardation is a situation which is
8 the opposite when you know the market is going
9 down. When that happens, you don't want to hold
10 inventory. Inventory is a hot potato, you want to
11 get rid of it as quickly as you can, sell it now
12 because it is going to be worth less tomorrow.
13 These are the rewards and punishments.

14 The forward pricing, Dr. Williams
15 mentioned, is sort of the horizon that we are
16 trying to understand and see whether there are
17 ways to stimulate, and all we have so far in
18 California, based on our stakeholder meetings, is
19 the OPIS numbers that people look at, which record
20 the one or two deal, three deals a day that might
21 be done. It is sometimes no deals that are done.

22 For next month, for example, the forward
23 market today being the end of April, maybe the
24 June contract because we are going into May, but
25 that's a very thinly traded market, the liquidity

1 of the forward market, as I said, is very thin,
2 people don't know what direction it's going to go,
3 it is growing. Some stakeholders -- the
4 stakeholders are of different opinions depending
5 where they sit and what they do in the market.
6 That is to say whether it is expanding by what
7 rate it is expanding. Right now, it is certainly
8 a thinly traded market.

9 Paper markets are contiguous too and
10 parallel to the physical flow of the product. If
11 you want to sort of hedge a position, you can take
12 out a paper contract at a fixed price linked to
13 what the price is on the day that you pump your
14 pipeline tender a month from now or three weeks
15 from now.

16 Paper markets are growing in popularity
17 here in gasoline, but still, not very deep. They
18 are transparent enough, they are picked up by
19 OPIS, so there's not really a lack of transparency
20 in pipeline, it's a lack of liquidity and depth.

21 Downstream storage, Dr. Williams has
22 done a lot of work in this area in other markets,
23 and we've found again and again that it is very
24 difficult if not impossible to hold inventory, you
25 know, in outlying terminals in Sacramento, San

1 Jose, and down in San Diego. The terminals are
2 operational inventory moving top to the bottom of
3 the tanks with each pipeline cycle that comes in.

4 Who are the players? Who are the
5 players in this market, who makes up this market
6 and forms these prices? The integrated
7 multinationals, that term sounds over blown, but
8 more and more that is the case in a global
9 economy. The integrated multinationals look at
10 the local market both in the same way and also in
11 a different way because they have different ways
12 to bring product into this market from other
13 supply centers and refinery centers.

14 The merchant refineries, you know who
15 they are, are not fully integrated downstream.
16 They don't have enough gas stations to take over,
17 enough customers to buy all of their productions,
18 so they sell at the rack, which once again is
19 linked to the pipe. It is all connected.

20 The jobbers and distributors sort of
21 work the arbitrage between the rack price and the
22 street price and the wholesale price. They work
23 in a back to back mode, they don't usually take
24 any risks. They try to avoid taking risks, they
25 pass on the price increases and try to pocket the

1 drops when they can, but try to stay in a back to
2 back line up with the street.

3 The cargo and the pipeline traders, you
4 can say what do you need them for if they are not
5 in a refinery. Well, each refinery center has
6 enough trouble trying to balance its own system,
7 and then the system as a whole comes out of
8 balance. In a way, the pipeline and cargo traders
9 are the supply department of the entire industry.
10 They sort of balance the total system as far as we
11 can bring it into line with other markets.

12 Holding it all together are the brokers,
13 the phone brokers mostly here in California, and
14 the price service providers, Platzz and OPIS who
15 tell us what is going on all the time because we
16 are not -- we don't have a clearing house and we
17 are not a futures market.

18 At that stage, I think we will turn it
19 back over to Dr. Williams.

20 DR. WILLIAMS: How deep is this
21 particular forward market, and so I thought we
22 ought really to compare it to some other markets.
23 These markets don't exist in and of themselves,
24 and we need some sense of whether is unusual or
25 extreme.

1 I have happened to have studied a couple
2 of other forward markets, and I thought quickly to
3 make some comparison with them that might help us
4 understand why different people can have different
5 views about the current forward market for
6 gasoline in California.

7 California is a major world producer of
8 almonds, and how does it trade forward? There are
9 a fair amount of forward trading with importers in
10 Germany, marzipan is a major German activity.
11 This is about a billion dollar a year market, and
12 it is quite important to California.

13 The U.S. ships a lot of corn to Japan,
14 maybe three or four billion dollars worth a year
15 on very large Panamax vessels. It is an important
16 market for our exports, but it's also a well
17 developed forward market, and I have interviewed a
18 number of corn traders in Japan about how they do
19 business there. I thought this might provide a
20 setting in which we can deduce what is the state
21 of the forward market in gasoline.

22 Just to go down some characteristics of
23 these markets, California gasoline is a pipeline
24 market as we have been hearing about. If there
25 were a lot of imports into California of gasoline,

1 it might well have been a Long Beach Harbor
2 delivery point or something like that because that
3 is very similar to what is going on in the forward
4 market for corn in Japan.

5 It is CIF, cost and insurance and
6 freight, paid on a Panamax vessel in Tokyo Harbor
7 is the typical pricing point. It also works at, I
8 think, the NOLA, and I bet unless you are a grain
9 trader you don't know that's New Orleans,
10 Louisiana. They just talk about NOLA all the
11 time, and CIF -- NOLA is the Mississippi barges
12 that are coming in that then are loaded onto these
13 vessels that go CIF Japan. You get these two
14 prices quoted a lot.

15 In contrast, in California, most of it
16 FOB Long Beach, that is somebody's committing as a
17 almond merchant here in the Central Valley to load
18 container vessels, containers to ship to Germany.
19 It is usually the commitment is to load in Long
20 Beach and the almond importer's responsible for
21 the transportation. Each one of these operates
22 differently, in large part because of the
23 logistics of the particular system. It is
24 important that it is a pipeline logistical system
25 for California for gasoline.

1 My next row talks about the extent
2 forward. Actually, almonds tries to go out the
3 farthest. It is an annual crop, almond exporters
4 sign contracts with importers that go out for the
5 rest of the crop year, whether these are honored
6 is an issue I will come to in a moment.

7 In California gasoline, it is about one
8 month, and in U.S. corn it is three to four
9 months. Again, this is primarily out of
10 logistical reasons, the most time it would really
11 take to get more gasoline into California or move
12 it through the pipeline system is about a month.
13 Not surprisingly, it's only one month forward.

14 California almonds are grown annually,
15 and so you would worry about forward pricing a
16 farther period. U.S. corn to Japan takes about
17 two and a half to three months. Often there are
18 deals done that bring CIF into barges in NOLA a
19 month or two ahead and then commit to or three
20 months across the Pacific, so that the most common
21 pricing of corn in Japan is actually a three month
22 forward. They have a very limited spot market.

23 Let's compare the lot sizes, 25,000
24 barrels are on a pipeline a piece, as Gregg was
25 talking to us about it, is the common lot, and

1 that is about a million dollars. Right there that
2 can't be a lot of small time players because a
3 million dollars is a lot of money.

4 You could be a smaller time player in
5 the almond market because the container which is
6 the typical lot size, about \$75,000, but the U.S.
7 corn market is also for big players, and it is
8 really the unit is a hatch, one seventh of one of
9 these big vessels, and that is 7,000 metric tons
10 of corn, which is a lot, although so is 25,000
11 barrels. That is actually a bigger lot size than
12 the typical value. Sometimes they trade the whole
13 vessel, so there are seven hatches. They are
14 talking \$10 M at a pop, so there can't be very
15 many players.

16 There are differences in the grades too,
17 and often this determines whether or not a forward
18 market is functioning. Gasoline happens because
19 mostly regulation, at this point, seems to be
20 extremely uniform, so there are disputes over the
21 qualities. In almonds, they are always disputing
22 whether it was a good shipment or not, and that's
23 one reason this forward market in almonds doesn't
24 work very well.

25 The U.S. corn is government graded, but

1 actually they are using grades that probably were
2 the best idea about seventy or eighty years ago,
3 and the Japanese are constantly complaining about
4 how the U.S. does the grading, but that is another
5 issue for us.

6 Fortunately, gasoline doesn't have this
7 problem, but this is all to lead to the major
8 issues before us. How many trades occur in these
9 markets? California gasoline, our best guess now,
10 seems to be a little different. A few years ago,
11 it was maybe three to five trades, including some
12 roll overs. That is actually comparable to the
13 amount of trading that goes on in the quite
14 advanced forward market, U.S. corn to Japan, four
15 to five trades a day, and is far more active than
16 California almonds, where there is maybe one or
17 two trades a day.

18 How many market participants are in
19 this? California gasoline, maybe at the outside
20 fifteen or twenty, something like that, some big
21 cargo traders. That's probably as many, if not
22 more, than the number participating in the U.S.
23 corn market. There's some big U.S. exporting
24 firms and eight of the big importing firms into
25 Japan like Mitsubishi, there are only eight of

1 them. You might even argue that there are only
2 ten or twelve players in the corn market, a few
3 more in California gasoline. Almonds has more,
4 but has one big player, Blue Diamond, and a lot of
5 small ones, so in some respects, the almond market
6 is even more concentrated than the California
7 gasoline market.

8 There are brokers in all three markets,
9 often it's used as a source of trading information
10 in all three. There are differences in pricing
11 style reflecting in a way how advanced our market
12 surround them.

13 The California gasoline forward market
14 prices flat, that is in cents per gallon, just so
15 much paid for that. So does almonds, so many
16 dollars a pound. U.S. corn delivered to Tokyo
17 Harbor is given in cents per bushel against the
18 Chicago Board of Trade. They trade a price
19 differential, a bases, they don't even convert to
20 yen, they use U.S. dollars, and the Chicago Board
21 of Trade bases -- it is called bases because it is
22 based on the Chicago Board of Trade, and is
23 actually a price differential then against the
24 Illinois River which is where Chicago Board of
25 Trade contracts.

1 You can talk to anybody in Japan, this
2 is the price they know, and it seems to bit odd to
3 us that they are not using the Tokyo Grain
4 Exchange futures market for corn, Chicago
5 dominates there.

6 Pricing transparency in this forward
7 market, not in corn markets in general, is fairly
8 good. You can call a broker up and get a
9 quotation any day. California gasoline through
10 OPIS is reasonably good too, none are great, but
11 they are good. In almonds, you can't get
12 quotations for almonds forward. They are traded,
13 but no one will say what the contracts were, so it
14 is a much less transparent market than we see in
15 gasoline.

16 Paper trading, by which I mean somebody
17 who doesn't really want the physical commodity,
18 could go in and buy it and then resale it or go
19 short first of all and sell it and then rebuy it.
20 You don't attempt that at all in almonds. Some of
21 it is done in Japan, and, in fact, there is a
22 particular market among the big importers when
23 vessels are on the water in the Pacific, they
24 redirect the boats for different uses. They have
25 a swap market in the hatches, and that is a form

1 of paper trading that's quite common in that
2 market.

3 There is some paper trading in
4 California gasoline, and that often has the form
5 of a role, that is someone postpones shipment on
6 the pipeline, and that is in many ways a form of
7 paper trading.

8 Last of all, is a characteristic that I
9 call defaults, that is somebody signs the forward
10 contract or makes a deal and doesn't go through
11 with it. In U.S. corn, it is very rare that there
12 is any dispute about the performance of contracts.
13 What we found out about California gasoline is
14 that this is rare, but happens. This is mostly a
15 credit risk issue or dispute over delivery terms.
16 That doesn't seem to happen very much.

17 I want to emphasize that other markets
18 are much worse in this feature, and that is -- a
19 good example is the California almond forward
20 market. There is a phenomenon called "market
21 rot". Almonds don't rot of course, but when the
22 price has fallen, the importers in Germany all
23 say, you know, there's something wrong with this
24 shipment. Traders who are exporting have gotten
25 to call this market "rot" because it only happens

1 when the prices have fallen, so there is some
2 strange renegotiation that goes on.

3 In almonds, they go through this ritual
4 signing these ten month forward contracts, but
5 never honor them. I don't quite know why they do
6 that, but that's how they operate in that
7 business.

8 To summarize from this chart, California
9 forward market for gasoline doesn't look all that
10 bad compared to some other forward markets, and
11 indeed it looks reasonably good. It is comparable
12 I would say to the U.S. corn forward market in
13 Japan.

14 Reasonable people can differ, it's not
15 the ideal perfect market with no transaction,
16 cost, and great depth, but compared to some other
17 markets, it is working reasonably well. It
18 doesn't look to me like it is a crisis, at least
19 compared to some other markets I've known.

20 Another way to look at forward markets
21 is to think about the prices that are in them. We
22 care about markets because they provide price
23 signals, and so I thought we could look at the
24 prices that have emerged in the forward market for
25 California gasoline, and see what signals they are

1 doing, and do they make sense.

2 I thought to show a particular example
3 here, which is from early September, the year
4 2000. It is a major price spike in California
5 gasoline, a lot of it having to do with the
6 uncertainty about electricity supplies and whether
7 the pipelines would be functioning. In any plot
8 of California gasoline prices, this particular
9 incident looms as one of the higher price spikes.

10 I thought we could look at this in a
11 little more detail and see what signals the
12 forward market is giving us. Maybe this graph is
13 a little hard to explain, but it is showing on
14 several days, and that is the code at the bottom.
15 Let's see if I can get -- let's find what's
16 happening on the 5th of September, it's the little
17 dots. Let's see if we can find dots here, there's
18 a dot, there's a dot, and there's a dot.
19 According to OPIS, there were three trades being
20 done commonly in the market that day. One was for
21 the second cycle of the pipeline in September, so
22 the second week of September. Other deals were
23 the 3rd and 4th cycle in September and the one was
24 sort of a month out. This is what we mean by the
25 one month forward market.

1 Potentially, there could have been
2 trading four cycles, September, first cycle,
3 October. In all this period no one seems to have
4 traded specifically first cycle, October. A
5 really deep forward market would have trading in
6 all of these cycles all of the time, that doesn't
7 seem to happen, but there was trading one month
8 out.

9 I want to now ask are these prices
10 sensible, and the quick answer is, it sure looks
11 that way. Here's a big disruption to the pipeline
12 system and some refinery outages, so the price of
13 wholesale gasoline here, the prompt price, we
14 would call it, has gone up to \$1.60 a gallon, very
15 high. For delivery just two weeks later, it's
16 merely \$1.50, and for a month later, it's \$1.30.
17 To put it another way, there's a thirty cent
18 premium for immediate delivery for prompt
19 delivery, and that's what we mean by a
20 backwardation, but more important it is a signal
21 that is very valuable now, do something with it,
22 and it won't be as valuable later.

23 I would say that anything that is
24 signaling that, these markets are making the right
25 signal, it is a temporary outage on the pipeline

1 system, temporary disruptions, there ought to be a
2 premium for immediate delivery over later
3 delivery. That is, indeed, what this system is
4 showing us, so the price signals make sense.

5 Can we say that this price on September
6 5 for a month out should be \$1.30 or \$1.27, I
7 don't think any of us could say that then or now,
8 but we can reasonably expect that it would have
9 been lower, and that is the price signal that was
10 happening.

11 MS. JONES: Excuse me, do you know what
12 volumes are associated with those prices?

13 DR. WILLIAMS: Two or three trades.

14 PRESIDING MEMBER BOYD: Jeffrey?

15 DR. WILLIAMS: Yes.

16 PRESIDING MEMBER BOYD: You are kind of
17 exhibiting what some people have indicated that in
18 this commodity market, gasoline, when prices are
19 high, it's advantageous to everybody to try to
20 move, to have product and move product to take
21 advantage of that high price. I think you are
22 saying there is not merit in holding back stock or
23 not having product available because the forward
24 market is telling you it's not going to be as
25 valuable anyway.

1 DR. WILLIAMS: Yes, and that's -- the
2 forward market is telling us that, and that seems
3 to me to be a very sensible signal. Let's put it
4 this way, the higher the price gets today, and if
5 it is a temporary disruption, it ought to be used
6 today and not save it. If the pipeline system
7 broke down forever, I expect all these prices to
8 go up, but that is not what is happening.

9 The market signal, it makes sense to me,
10 in the sense that it's demonstrating a temporary
11 disruption. It could get worse, but a reasonable
12 expectation is that it gets better, and that is
13 consistent with the price signal that is going on.

14 PRESIDING MEMBER BOYD: A refiner who
15 has a breakdown, an outage, is being disadvantaged
16 because he can't take advantage of the current
17 market condition?

18 DR. WILLIAMS: Yes. By way of
19 comparison, let's look at some of the other
20 markets in this same period, September 7 is a good
21 day to look at. Here's where we are observing the
22 California forward market for gasoline. This is a
23 New York Harbor price for gasoline, it goes out
24 farther, there is more futures trading, and indeed
25 it goes way out to here.

1 This is crude oil on NYMEX, which is
2 Cushing, Oklahoma, and it goes out five years, so
3 way out there, and it stays pretty flat. All
4 three markets are showing what we are calling a
5 backwardation, that is the nearby prices are
6 higher than the more distant ones with this
7 exception, this is sort of the same price.

8 In New York Harbor, there was a premium
9 for gasoline immediately delivered versus a month
10 later. Nothing like the premium seen in
11 California, but still a premium, so there was a
12 market signal in New York Harbor, minimize
13 inventories, move product as quickly as possible.
14 That was partly because that's the same signal in
15 crude, crude's getting cheaper in prospect all the
16 time. Crude may be more expensive later, as it
17 happens, but the market signal says crude is
18 getting cheaper. The market signal visible to
19 participants at this moment.

20 Of course, there's this big price spike
21 in California, this versus this price is very
22 high, but the market signal says this is temporary
23 and going away. I would ask us here to make a
24 proposition had three month forward gasoline
25 traded in California, what would that price had

1 been. I think would have extrapolated out here to
2 about a price like that, wouldn't we have? That's
3 probably the more normal relationship. See about
4 where I am.

5 That says these are reasonable market
6 signals about temporary disruptions specific to
7 California, and a very important market signal to
8 indicate that, but one reason why we don't see
9 much trading forward in California gasoline is
10 that this market signal here is in a way redundant
11 with these. Given that New York Harbor gasoline
12 trades quite liquid in a quite deep market, I
13 would not expect California in three months to
14 trade very much because it is basically the same
15 price signal.

16 These are different price signals, and
17 why California gasoline can have different price
18 signals on these short dates is precisely because
19 of the logistical restraints and disruptions
20 specific to California. In other words, I find
21 this a perfectly natural phenomenon.

22 We may not like these disruptions for
23 sure, but the prices that result from them seem to
24 me to be perfectly explainable.

25 PRESIDING MEMBER BOYD: While many of us

1 understand that the California public has a tough
2 time understanding why we're stranded way up
3 there.

4 DR. WILLIAMS: Well, I think it has to
5 do with logistics systems more than with the
6 pricing system.

7 PRESIDING MEMBER BOYD: That's why we
8 are all here today.

9 DR. WILLIAMS: Yes, indeed, but I want
10 to concentrate -- it's not because there is not a
11 forward market I don't think.

12 COMMISSIONER GEESMAN: There's not a
13 forward market beyond about thirty days out.

14 DR. WILLIAMS: That's because that's
15 where the logistics make California no longer
16 separate from the rest of the country. Here in
17 this extreme example, let's say it's more normal
18 times you sort of expect California like about
19 that higher, that is another thing that is
20 unfortunate about California, but that's the way
21 life is. It would probably be like that, this
22 time it goes way up, but it's going to converge.

23 Look at gasoline like this, if we
24 plotted many different years, every September, we
25 would see gasoline in a relationship to crude.

1 The variabilities on the near buys, there's a need
2 for gasoline now or refineries are constrained in
3 New York Harbor, but the long run is to get back
4 to an average.

5 COMMISSIONER GEESMAN: Can I get a bid
6 twelve weeks out? Let's say I want to lock in
7 my --

8 DR. WILLIAMS: No, you can't, but you
9 can get an extremely close substitute to that,
10 which is New York Harbor gasoline --

11 COMMISSIONER GEESMAN: Is there an arb
12 trade somewhere that --

13 DR. WILLIAMS: There's going to be an
14 arb trade when you get to about a one month out,
15 and so --

16 COMMISSIONER GEESMAN: Is that commonly
17 used?

18 DR. WILLIAMS: It seems so, it seems so,
19 but that gets into the private trading strategies
20 and not many stakeholders said that. I'm
21 basically arguing here that we would not expect a
22 forward market in California gasoline to go much
23 beyond the logistic system anyway.

24 Given that we have a very active forward
25 market already in New York Harbor gasoline, the

1 world would be different -- we could have a very
2 active California gasoline market twelve months
3 out, but that would make superfluous the distance
4 New York Harbor gasoline market.

5 COMMISSIONER GEESMAN: But I could
6 satisfy it in my hedging needs in the NYMEX
7 market?

8 DR. WILLIAMS: Yes. up to about one or
9 two months when the logistical constraints on
10 California make the distinction, and that's a very
11 important point. Indeed, that same idea applies
12 to the corn market in Japan, they don't hedge on
13 those cargos more than three months out because
14 that is the logistical reasons. If you wanted a
15 hedge as a importer of corn in Japan, you use the
16 Chicago Board of Trade twelve months out. It
17 seems to me this is a perfectly natural system.

18 I want to make a final point with these
19 forward prices from this same period. This is
20 another way of looking at these price spikes, this
21 is along this same dates I've shown here, August
22 through early October. This is a crucial price
23 spike where I've now looked at Los Angeles prices
24 versus U.S. Gulf. This is what we mean by a price
25 spike, the spot price went way up, but is that the

1 relevant price for comparing California prices to
2 U.S. Gulf prices? Yes and no.

3 The no part is you can't get U.S. Gulf
4 gasoline, yes it's not exactly the same grade, but
5 that is not quite the issue here, to California
6 immediately. It takes three weeks to four weeks,
7 so the relevant price to somebody selling gasoline
8 into California from someplace else, is that one
9 month forward price, which I have plotted here.
10 That spread, while higher in this period, isn't
11 anywhere like this, and it is this spread that is
12 this spacial arbitrage spread. While this looks
13 like something was a little funny that day, most
14 days this is a reasonable spacial and one month
15 price differential.

16 An arbitrager, an importer, sees this
17 price, not this price. He'd love to get gasoline
18 here in one day because he could take advantage of
19 that price, but he can't, it's this forward
20 market. It looks like to me that this forward
21 price is providing a reasonable spacial signal
22 too, if we take this as the price as importer is
23 seeing. If this were at fifty cents, I'd wonder
24 about that because the tanker rates and so forth
25 would seem to be much smaller, but twenty to

1 thirty cents, is plausible.

2 I can't conclude that it should have
3 been twenty instead of twenty-two, but I can
4 conclude that this sixty isn't the relevant price
5 differential for an import. It's this forward
6 market, and that seems to be in line.

7 All of this is really just saying that
8 typically in the California market, the spot price
9 is higher than the forward, that there is a
10 backwardation in these markets, and that most of
11 the price spikes coincide with the spot rising far
12 above the forward, and that is a reasonable price
13 signal.

14 It is typical in this market to have a
15 backwardation, there are, however, contangos,
16 which is the forward is higher than the spot, and
17 those seem to coincide primarily with the build up
18 to the summer driving season and probably have
19 something to do with the spec changes. There
20 seems to be storage at this period.

21 In our stakeholder interviews, it was
22 clear that market participants noticed this
23 intertemporal price difference. Not all of them
24 had a lot of inventories that they could play with
25 or capacity, but they were all aware of these

1 prices, and some of them were adjusting their
2 inventories. If they might have held three day
3 average inventories, some days they held four, and
4 sometimes two, and the two were when it was a
5 backwardation, and the four was when it was a
6 contango.

7 This price signal seems to have some
8 affect, although we might have imagined it went
9 from zero to ten, it does go at least from two to
10 four. Put all these pieces together, it seems
11 like this forward market is having desirable price
12 signals to a pretty close approximation, at least
13 I conclude that. Other people may say, no, it is
14 off by a little bit, but the magnitude is what's
15 really important. It is not the existence of this
16 market, that is happening regardless.

17 Now, let's turn to the second phase, so
18 even though I conclude for one that this forward
19 market isn't obviously broken, it's still relevant
20 to ask what would happen if the California Stage
21 Agencies consolidated their purchases and perhaps
22 made this a better functioning forward market.

23 I'll let Gregg say a little bit about
24 that now.

25 MR. HAGGQUIST: I have a slide with all

1 my conclusions, but I won't repeat them here.

2 Thank you, Dr. Williams.

3 In keeping with quoting the
4 philosophers, Wickenstein, the father of modern
5 semantics, said the job of a philosopher, in this
6 case the CEC, is to show the fly the way out of
7 the fly bottle. Having said everything we've just
8 heard, we still look back and we have trade of
9 fifty cents a gallon above the rest of the country
10 for over a month, and that is \$600 M or \$700 M, so
11 the fly is still in the bottle one could say.

12 One way to lead the fly out is to try to
13 stimulate this forward market, and what tool do we
14 have available. It was suggested that perhaps the
15 government purchase power that is already out
16 there might be used to, you know, jump start that
17 forward market if there was enough critical mass
18 and if it could be done. That was sort of the
19 focus.

20 Having said that, in keeping with Dr.
21 Williams' presentation, these stakeholder meetings
22 were sort of geared from the refinery down to the
23 street rather than the international side of
24 things. It was a different focus, so we will hear
25 more about those other things later, the real

1 relationship to NYMEX and so forth outside of California.

2 The government contracts we discovered
3 are spread over about twenty different agencies in
4 California and different jurisdictions and
5 municipalities, so it is not one monolithic system
6 at all.

7 The service providers and the suppliers
8 have drifted in the direction of small
9 independents rather than major oil companies. We
10 asked these service providers why they did it and
11 why the other bigger companies did not do it, and
12 it is the nature of the business. It is the fact
13 that this business of servicing government
14 contracts is labor intensive, small lots
15 geographically dispersed over the state might
16 deliver to CHP, California Highway Patrol, in the
17 central urban areas or to Lake Arrowhead or Lake
18 Tahoe in small bobtail trucks to the forest agency
19 on another delivery. It is pretty much a
20 scattered market and labor intensive market.

21 The current pricing system is really and
22 contract system is led by the regional authorities
23 about ten regions across the state, and the
24 contracts tend to be three years in duration.
25 Once you win it, you have it for three years, and

1 the pricing is linked to OPIS daily price, so if
2 the CHP needs a delivery, they are going to pick
3 it up on a contract basis, have it delivered to
4 them on an OPIS related price for today, Monday,
5 Tuesday, Wednesday, each day, depending on what
6 day they lift.

7 The relationship to the spot market is
8 quite important here because I said earlier the
9 spot market is formed by pipeline trades, and spot
10 market pops up or jumps or spikes when there is
11 disruption in the pipeline trade. A supplier
12 can't cover his obligations, has to go out and
13 buy, this pushes that pipeline market up
14 significantly, and with it goes the unbranded rack
15 price, the unbranded rack price, the merchant
16 refiners, from whom all of this government supply
17 is sourced. The government contracts are links to
18 the spot market by way of the unbranded rack
19 prices.

20 They don't use the DTW, the Dealer Tank
21 Wagon prices, they don't use the branded, the
22 Exxons, the BP's, and the Chevrons, it is the
23 unbranded market that governs what they pay.

24 Important to whether we can get the fly
25 out of the fly bottle is the size of this market.

1 Is there enough critical mass to make a
2 difference? We discovered that it tends, I
3 believe, it is maybe about less than \$5,000
4 barrels a day. It is less than one percent, it is
5 a very small volume, one tender a week perhaps,
6 one piece we say on the pipeline, 25,000 barrels.
7 If we were to shift all the demand of all the
8 government agencies and aggregate it, that's what
9 we would have to work with.

10 Forward pricing pros and cons, we
11 wrestled with this because we said, well, can it
12 be done by simply changing the structure of the
13 contracts piecemeal, one by one, CHP,
14 municipalities, hospitals. Clearly, that would be
15 a bureaucratic nightmare, so we kind of abandoned
16 that concept, and also we considered the business
17 culture and the present operations of it. The
18 nature of the companies that are servicing these
19 contracts, their business culture is get it to the
20 customer at today's price. They are not
21 speculating on the market, they are not looking at
22 incoming cargos or forward markets. To tell them
23 or ask them to shift their horizon to the future,
24 calls into play a whole new orientation that they
25 are not accustomed to.

1 We said okay, that being the case, what
2 if we aggregate all of the demand and do it on
3 behalf of the entire state as on the pipeline or
4 in some other form because this is the way big
5 companies in the private sector do things. These
6 headquarters will often aggregate at the risk for
7 the entire system, so to speak, and put on an
8 offsetting position as they call it. If we were
9 to aggregate the total government demand and go
10 out there and buy thirty days forward on a rolling
11 basis, so that it would sort of mirror what is
12 being picked up day to day, it should be a zero
13 sum game. It should be a zero sum game.

14 The purpose of it would not be to really
15 hedge the price, but rather to stimulate that
16 forward market. Would it serve the purpose and
17 what would you do with the gains and the losses
18 because against that forward price, some days you
19 would win and some days you would lose. Once
20 again, you've got questions of government
21 procedures and bureaucracy, you have to work that
22 out.

23 Would it serve the purpose? You know, I
24 think we reached the conclusion that it probably
25 isn't robust enough in volume. If it were a

1 bigger volume, then it may be a different story.
2 You could aggregate if it was 25,000 barrels a day
3 or 50,000 barrels a day. What percentage is that
4 of what is already traded on the forward market.
5 If we say we are doing three, four, or five deals
6 a day as a maximum, then we would bring in,
7 introduce into 25 percent, but that is not the
8 case. It's not that big of a volume.

9 At this point in time, it appears that
10 the fly is still in the bottle. If we are going
11 to be looking at ways of stimulating the forward
12 market, we have to look in other directions.

13 Okay, Dr. Williams.

14 DR. WILLIAMS: When I started this
15 project with Gregg last fall, I rather hoped to be
16 standing here and making some statement, there is
17 some small technical detail about the forward
18 market the way the logistics work that the players
19 all understand that there's some constraint on
20 this market as an institution, but they just can't
21 seem to get together to solve some trading rule
22 that would only make it if the state could get in
23 with this example about redefining a contract, get
24 everything started, and everything would be happy.
25 That would be a quite nice conclusion to present.

1 We can't make that conclusion. We have
2 found instead that the California gasoline market
3 isn't broken in an obvious way. I guess that is
4 good news, but it doesn't make for a strong
5 proposal, so instead it seems that while it is not
6 especially deep, it operates much as other forward
7 markets do of a similar logistical issues.

8 The California forward prices appear to
9 be reasonable in comparison to NYMEX and other
10 crude markets, although sometimes they seem
11 unreasonably volatile, they are still making
12 reasonable pricing signals. Most important, they
13 seem to be reasonable signals for storage and
14 input decisions, so it is not that anything is
15 broken.

16 Also, it doesn't seem that the state
17 deals in a large lot size that will fundamentally
18 transform this market, even though it is buying a
19 lot of gasoline, so is everybody else in the
20 state, and so the percentage ends up being quite
21 small.

22 If the state would be adding about one
23 trade per week, that would surely improve the
24 liquidity but not very much, and it's unlikely to
25 go on this virtuous circle. This assumes we could

1 aggregate the state's trading. It might be wise
2 for the state to be using some hedging instruments
3 and buying forward and so forth, but if it did so,
4 it would still have to convert all those trades to
5 the small lot sizes of the individual deliveries,
6 and shortly you would have to use paper trading on
7 the forward market.

8 If there were a paper market already,
9 that might be wise, but we are not in a position
10 where the state can do that it seems to me.

11 There we conclude. Any questions?

12 PRESIDING MEMBER BOYD: Thank you,
13 gentlemen. In reading your report, I kind of
14 concluded that, well, I, too, entered this phase
15 thinking that we didn't have as much of a forward
16 market as you seemed to have discovered we do
17 have, and secondly, that gee maybe the state would
18 make a difference, but the market's bigger and the
19 state is a tiny little ripple on the pond
20 apparently, and you're presentation here today
21 kind of reinforces that. I appreciate --

22 DR. WILLIAMS: It would be nice if there
23 were a simpler solution, but there doesn't seem to
24 be one, at least in this dimension.

25 PRESIDING MEMBER BOYD: As a long time

1 member of the bureaucracy, I agree with you that
2 it would be difficult at best. Although I think I
3 would -- I will forward this to my friends in
4 General Services Department, we got to know them
5 well in the natural gas and electricity crisis,
6 the state does actually participate in the natural
7 gas market a little more. It might find some
8 little opportunities here, but not too much.

9 DR. WILLIAMS: It might make sense for
10 them just from a budgetary reason to be
11 participating in the gasoline futures market or
12 something, but that's a very different topic.

13 PRESIDING MEMBER BOYD: Its kind of
14 tough when you're broke too.

15 DR. WILLIAMS: Yes.

16 PRESIDING MEMBER BOYD: I appreciate
17 that very much what you've done here. I'd like to
18 throw the floor open for questions from anybody in
19 the audience and I neglected something in my
20 housekeeping chores at the beginning of this
21 meeting. Those of you listening in on the
22 webcast, if you have a question, you may e-mail
23 your questions to the following e-mail address,
24 lstamets, that's l-s-t-a-m-e-t-s@energy.state.caws
25 and Leigh Stamets will sometime during the day

1 read the question and put it to the forum, so a
2 little late start for this panel, but hopefully
3 people took note of that for the future. Anyway,
4 questions from the folks here or listening in?
5 Well, you convinced everybody. Oh, here we go.

6 MR. GEISKES: Thomas Geiskes with
7 Stillwater. Dr. Williams, I heard you say that a
8 trader would love to get the gasoline here in one
9 day. Would you think that's a role that the SFR
10 as proposed could fulfill?

11 DR. WILLIAMS: That gets into the
12 acquisition and dispersal rules of the SFR, why
13 don't we hold that off to discussion this
14 afternoon, and I'll turn around for some questions
15 for you about that.

16 It is very clear that if there is
17 gasoline here, it's worth a lot, but it's not
18 clear whether it is to be made with a refinery or
19 it's in a stockpile, or it could be imported
20 quickly, is worth more. It can't be imported
21 quickly or made quickly is probably why that price
22 is so high, right?

23 MR. GEISKES: Then I had a forward
24 question, which really is linked to these other
25 forward markets that you drew the comparison with.

1 I think maybe the agricultural markets are natural
2 markets for forward trades because of the crop
3 cycles. If almonds, for instance, had been
4 produced on a continued basis and shipped on a
5 continued basis, like gasoline, would there even
6 have been a forward market such as similarly
7 traded commodity?

8 DR. WILLIAMS: Probably not. Yes, it is
9 very much the crop cycle that is doing a lot of
10 this, and in a way that is a broader principal
11 about the logistics systems, right, broadly
12 defined. You can't grow more almonds this year,
13 that's a logistical constraint in some sense. The
14 reason we trade corn a year out has a lot to do
15 with that crop cycle, but in the broader category
16 of logistical constraints.

17 MR. STEVENSON: Dwight Stevenson,
18 Tesoro. Question for Jeffrey Williams, would your
19 conclusions be any different if the size of the
20 trade were 5,000 barrels instead of 25,000
21 barrels? It is my understanding that the minimum
22 lot size on the pipeline is 5,000 barrels.

23 DR. WILLIAMS: The minimum lot size is,
24 but the typical trade seems to be 25,000 barrels.

25 MR. STEVENSON: I'm not aware of any

1 reason why a 5,000 barrel --

2 DR. WILLIAMS: There's not a particular
3 reason it couldn't, right, so --

4 MR. STEVENSON: Okay. Do you have any
5 statistics on the new trading that is happening on
6 New York Mercantile access market?

7 DR. WILLIAMS: No, but I've been
8 following a little bit, there's this swap market
9 with California gasoline you are referring to,
10 right?

11 MR. STEVENSON: Yeah, based off the New
12 York Mercantile price, yeah.

13 DR. WILLIAMS: There's been no trade
14 yet.

15 MR. STEVENSON: There hasn't, okay.

16 PRESIDING MEMBER BOYD: Dr. Williams, I
17 guess one nagging question from me -- oh, you have
18 another question?

19 MR. STEVENSON: I'm sorry.

20 PRESIDING MEMBER BOYD: Go right ahead.

21 MR. STEVENSON: Yeah, they are showing a
22 price, but there's just no trades on it?

23 DR. WILLIAMS: Yeah, there's no open
24 interest, so I don't quite where they got a price
25 from.

1 MS. JONES: Could you clarify what that
2 product is?

3 DR. WILLIAMS: The New York Mercantile
4 Exchange has designed specific swap markets so you
5 can trade a differential California gasoline
6 versus other. In a way what they are selling the
7 product of their clearing system and their credit
8 constraints, so potentially traders in California
9 could enter that market and be quoted on NYMEX.
10 Since they have an electronic platform they can
11 offer a lot of these different specific, location
12 specific, swaps.

13 MS. JONES: What's the time?

14 DR. WILLIAMS: I think they can go out
15 four or five months, but there is no limit on
16 that, nobody has traded it yet, and that may be if
17 it is started traded a lot, more people would
18 trade it. It is that virtuous circle about these
19 markets, but it may also be that there are other
20 instruments out there that make that one
21 redundant. It's hard to tell those two reasons a
22 part. The fact is, no one has traded it, and
23 that's true of a lot of the other specific
24 products that they have offered like that.

25 PRESIDING MEMBER BOYD: The fact that

1 there's a little more of a market than we thought,
2 it there any correlation between the recent entry
3 of the Costco's and Safeways and larger
4 organizations like that in the retail gasoline
5 business? Has that had any affect --

6 DR. WILLIAMS: From our stakeholder
7 meetings, there's no direct influence from them.
8 They don't seem to be trading in this market
9 directly, but maybe there's an indirect affect. I
10 would perhaps pause it, but this is going to be
11 very hard to prove one way or the other that the
12 price spikes themselves has caused more forward
13 trading.

14 There is a certain circularity in that
15 reasoning that I am aware of, but I think it is
16 entirely possible.

17 COMMISSIONER GEESMAN: Have you seen an
18 increase in trades in the NYMEX?

19 DR. WILLIAMS: Let's see, I have to put
20 statistics of open interest in my head, and I hope
21 I remember them correctly. Somewhat, I think
22 NYMEX has had in gasoline increasing open interest
23 over the last few years, but it sure moves a lot.

24 COMMISSIONER GEESMAN: Would you
25 correlate that to increased price volatility?

1 DR. WILLIAMS: Probably, it seems they
2 are trading farther out which is a symptom of that
3 too.

4 PRESIDING MEMBER BOYD: Dr. Verleger.

5 DR. VERLEGER: Yes, my name is Philip
6 Verleger, I'm BP Senior Counsel, Foreign
7 Relations. Jeff, excellent presentation, I can
8 see your book.

9 DR. WILLIAMS: Both of us had a part
10 here.

11 DR. VERLEGER: I can see your book on
12 the rational number of futures market. A couple
13 of points and then a question. Gasoline futures
14 trading is declining right now because the NYMEX
15 has refused to list a futures contract for after
16 December 2003. The reason they won't list it is
17 because there's now uncertainty between New York
18 and New Jersey as to the oxygenated content and
19 whether it is ethanol or whether it is MTBE.

20 Just like California, this is a problem
21 that the NYMEX has had in the past. I have
22 testified as an extra for the NYMEX a couple of
23 times. Open interest in volume in the NYMEX
24 gasoline futures declined dramatically in 1995 to
25 about 60,000 contracts from 150,000 when they were

1 switching from conventional to a formulated
2 gasoline while there was a significant debate over
3 the deliverable futures contract.

4 That gets into a point when you talked
5 about hedging, you had the wonderful graph, and
6 you also had not just gasoline but crude oil,
7 which goes out until 2008, which a firm could also
8 use as a means of hedging because the margins are
9 relatively steady going out.

10 DR. WILLIAMS: One reason I hesitated
11 when you asked what is happening to NYMEX open
12 interest, we talked about it as "a market", but in
13 fact it is near buy contracts, medium term
14 contracts, and the composition of trading in those
15 changes a lot, and it is hard to generalize.

16 DR. VERLEGER: It's always seasonal peak
17 in the summer months and 100,000 contract roughly
18 right now, and it goes up and down. There's not
19 so many for October and November because there are
20 less likely to be spikes.

21 The questions I have, two. One, did you
22 look at the size of the potential market for
23 counties and school districts and so on because as
24 I read your report, it is just looking at state
25 agency forward demand, and if you look at hedging

1 the IMF recommendations and so on, on hedging by
2 governments, it would seem that the counties have
3 as much incentive to hedge their demand and their
4 fairly substantial school bus demand. I have no
5 idea what that size of that market is.

6 DR. WILLIAMS: We looked a little bit at
7 that, enough to see that it is probably about the
8 same order of magnitude or individual police
9 departments versus the state police. There is
10 some there. If you aggregate it all, it matters
11 maybe 4 or 5 percent of the state gasoline demand.

12 DR. VERLEGER: It's another portion of
13 the market which might. The second question is
14 that we heard that we have small jobbers that have
15 trouble hedging. What I am trying to realize is
16 before I move back to California, I lived in New
17 England for three years, and in New England, any
18 homeowner -- most homeowners use heating oil, and
19 any homeowner can buy a fixed price contract from
20 a relatively small jobber and they are buying
21 smaller lots than the California Highway Patrol
22 was buying, and the majors moved out in 1980, and
23 it's all relatively small people. It's all linked
24 by the NYMEX, with much greater basis risk, and I
25 am wondering why we don't see that development in

1 California with the jobbers and so on doing that
2 here, whereas one sees a very robust and largely
3 developed market. Interestingly where the number
4 of jobbers decreases because the economy is a
5 scale and the capital required to do these trades
6 grows, but, I mean, it is working there. What's
7 the difference?

8 DR. WILLIAMS: I think there are two --

9 DR. VERLEGER: Do you have any speculation?

10 DR. WILLIAMS: I think there are two
11 affects, Phil. One is that there were customers,
12 individual homeowners, wanting fuel oil, they
13 wanted a fixed price contract, and that would be
14 equivalent if various state agencies here decided
15 that for budgetary purposes, they would like that,
16 and they did the bidding contracts that way. They
17 haven't done that, so there isn't the backwards
18 movement and all that.

19 The other part is that the typical fuel
20 oil dealers holding some inventories, so --

21 DR. VERLEGER: Not any more.

22 DR. WILLIAMS: He's doing something.

23 Well, none of these --

24 DR. VERLEGER: No, it's moved to the
25 major terminals, sorry to correct you.

1 DR. WILLIAMS: They still have the
2 potential to have an inventory, right? None of
3 these contractors with the state seem to ever be
4 particular inventory players. I don't know why
5 not, they are just not, but I think it is mostly
6 that the state -- if the state said we want to
7 sign a contract for this school year or something
8 like this or for a whole year a flat price, that
9 probably would cause different hedging instruments
10 to be used I feel. They don't do that.

11 Any questions for Gregg here please? I
12 guess we are finished.

13 PRESIDING MEMBER BOYD: Thank you very
14 much. Leigh, you had no questions? Okay. All
15 right, our next subject is going to be Permit
16 Streamlining for Petroleum Product Storage, Robert
17 Lanza and Mariella Cacho, sorry if I am butchering
18 the names. I've not met these people. Cacho, ICF
19 Consulting.

20 MR. LANZA: Good morning, I'm Robert
21 Lanza from ICF Consulting. My colleague is
22 Mariella Cacho, and we prepared this report on
23 Permit Streamlining for Petroleum Product Storage
24 Facilities.

25 What we are going to talk about is the

1 introduction to why we prepared the report, we
2 will go over the study methodology, the
3 description of a typical permitting process for
4 petroleum product storage facility, we'll go over
5 the CEQA process, and the California Permit
6 Streamlining Act.

7 We will talk about what we identified as
8 the critical path permits for permitting petroleum
9 product storage facilities. We will talk about
10 the responses to the interviews we conducted over
11 the course of the project, and we will also
12 conclude with some recommendations.

13 The way we started this is that we
14 identified that there were claims that the
15 permitting process for petroleum product storage
16 facilities was contributing to a shortage of
17 storage capacity in the state, and the California
18 Energy Commission requested that we look into the
19 permitting process and interview permit applicants
20 and permitting agencies to identify whether the
21 claims that the permitting was affecting the
22 storage capacity, were in fact the case.

23 What we did is we attempted in
24 interviewing the applicants and interviewing the
25 permitting agencies, and investigating the

1 permitting process, to identify bottlenecks in the
2 process and also to develop recommendations as to
3 how some of those bottlenecks could be removed and
4 how some of the redundancies in the permitting
5 process could be addressed.

6 The study methodology was conducted in
7 three phases. The first phase is that we
8 interviewed permit applicants and representatives
9 of permitting agencies. These were applicants and
10 agencies that were either recently in or currently
11 involved in permitting petroleum product storage
12 facilities.

13 Based on the interviews, we also
14 researched the regulatory process and the
15 permitting process, both at the regional level for
16 air permits and at the local level for building
17 permits, and other local permits that are issued
18 for construction and expansion in storage
19 facilities.

20 The third part of the process is the
21 final report that we prepared with our conclusions
22 and recommendations.

23 We contacted a large number of
24 applicants in terms of people that were operating
25 petroleum product storage facilities. We also

1 contacted a number of regulatory agencies that
2 issue permits. Not all of the people here listed
3 actually got back to us with information, most of
4 the people that we talked to wanted to remain
5 confidential, most of them are in the permitting
6 process or recently concluded the permitting
7 process, so they wanted to not be identified, so
8 we haven't identified, particularly in the report,
9 who we talked to in most cases.

10 In most cases, two or three people told
11 us the same thing, in any case, so we came to the
12 point where we didn't have to identify individuals
13 in the report.

14 The interviewees were self selected,
15 anybody who got back to us with information got
16 themselves into the report. The people that we
17 contacted that didn't provide information chose
18 not to do so.

19 What we did was we put together a couple
20 of questionnaires, one for permit applicants and
21 one for permitting agencies, and we asked them
22 about the process, to identify bottlenecks, to
23 identify what they thought were the critical paths
24 to getting the permit for new facilities for
25 expansion. We asked them about the timing of the

1 permitting process.

2 We asked them also about the cost of the
3 permitting process, we did not get a lot of
4 information from applicants concerning the cost of
5 the process. A lot of the cost information they
6 said was proprietary, they told us that they would
7 talk about cost in terms of the percentage of the
8 overall project cost, but that was the extent of
9 the information that we could get concerning the
10 cost of the permitting process.

11 Most of the permitting cost was in the
12 form of consultant fees in terms of internal cost
13 for preparing applications. We found that the
14 permit fees paid the agencies for air permits,
15 local building permits, etc. were not a
16 significant percentage of the overall cost to the
17 applicant of getting a permit.

18 We also asked similar questions to the
19 permitting agency in terms of the types of permits
20 that are issued for petroleum product storage
21 facilities, we asked them about the permitting
22 process in time line, we talked to them
23 concerning, you know, the factors that influenced
24 the duration of the permitting process and the
25 outcome of the permitting process.

1 Several of the agencies provided very
2 detailed information to us concerning what they do
3 in terms of reviewing a permit application at the
4 local government level for permitting and
5 expansion or permitting a new facility.

6 We also talked about permit agency
7 staffing with respect to do the permit agencies
8 have enough staff to review the applications that
9 they get. We found that is was a problem at the
10 local government level with respect to the
11 application for petroleum product storage facility
12 being a very large and detailed engineering
13 document.

14 At the local level for building permits
15 and conditional use permits for zoning, we found
16 that the agencies did not necessarily have the
17 staff they needed to review the applications in a
18 timely manner.

19 We talked to a number of the agencies
20 concerning the typical permitting process and we
21 also did some research into the regulations that
22 drive the permitting process for storage
23 facilities, and we identified a large number of
24 permitting entities that can be involved in
25 writing permits for existing facility expansions

1 and for new facilities.

2 The major ones are the local government
3 organizations that issue building permits, that
4 issue conditional use permits for zoning, that
5 issue hazardous materials permits, and other
6 permits at the local government level. The other
7 significant permitting agencies, of course, are
8 the air permitting districts within the state
9 which issue air permits for the facilities.

10 Depending upon where the facility is
11 located, there can be a large number of permitting
12 agencies involved. There are, as you are aware, a
13 lot of local government entities and also state
14 government entities that can deal with coastal
15 zoning issues, that can deal with land use issues,
16 etc. Some of them are listed here.

17 This is a depiction of the typical
18 permitting process at the local government level.
19 We identified some typical timelines for preparing
20 local application, and this slide depicts the
21 process for coming to the point where you have a
22 completed permit application, and you can see the
23 steps here that are kind of complicated.

24 You have the preapplication process,
25 which is where the applicant and the local

1 permitting agency, at least theoretically, have a
2 preapplication meeting to discuss the nature of
3 the project and to identify the ground rules and
4 regulatory requirements for the project.

5 What we've found is this doesn't happen
6 in every case, that the communications process
7 between the local governments and the permit
8 agents and the permit applicant is not always
9 occurring at an early enough point in the process.
10 The applicants going and doing things with respect
11 to preparing the proposed facility without
12 necessarily knowing what the permit agency is
13 going to want or what the permit agency expects to
14 get in the form of a permit application.

15 One of the things we concluded is that
16 this preapplication process needs to occur very
17 early in the process, almost at the inception of
18 when the permit applicant decides we need to do
19 something with respect to an expansion or with
20 respect to a new facility. That communication
21 process with the permitting agency should occur
22 almost immediately at that point.

23 We also identified a similar situation
24 with respect to stakeholder communications, that
25 the initial part of the process is very critical

1 to get everybody on the same page.

2 Here you have the remainder of the
3 process, a local planning commission is going to
4 review the application with respect to land use
5 permits with respect to building permits, with
6 respect to conditional use permits. A conditional
7 use permit is where the land that the proposed
8 facility would be situated on is not zoned for
9 heavy industrial use, and we found that also to be
10 the situation where land that is zoned for heavy
11 industrial use, which is what you would want to
12 put a petroleum product storage facility on is,
13 not necessarily available.

14 Even with respect to expansions of
15 existing facilities, the existing facilities may
16 not be surrounded by land that is appropriately
17 zoned for the expansion, and that leads to the
18 requirement for a conditional use permit.

19 A conditional use permit doesn't change
20 the zoning of the property, it just allows the
21 facility to be built on a piece of property that
22 isn't zoned for heavy industry. We found that the
23 conditional use permit is one of the critical path
24 permits that is causing bottlenecks with respect
25 to the permitting process.

1 The second part of the process, after
2 you get to the completeness determination where
3 you have a complete permit, is you enter into the
4 CEQA process. You have three things that you can
5 have in the CEQA process. You can have a negative
6 declaration, a notice of exemption, or an
7 environmental impact report.

8 Potentially, some of the expansions of
9 existing facilities would potentially be exempt
10 from CEQA, and you can have a notice of exemption
11 issued for those types of processes.

12 You can also have a negative declaration
13 where you have potential impact, but that impact
14 can be mitigated. Most facilities, however,
15 especially existing facilities -- especially new
16 facilities, are going to be subject to the full
17 environmental impact report process.

18 You will see that there are timelines
19 here, these timelines are typically timelines that
20 we identified for the process. These timelines do
21 not necessarily conform with the California Permit
22 Streamlining Act, which covers the CEQA process.
23 We'll talk about that in the next couple of
24 slides.

25 With respect to the application

1 completeness determination, the process for
2 determining completeness of an application is the
3 agency receives a permit application, within 30
4 days the agency should decide whether the permit
5 application is complete, and what we found is that
6 there isn't necessarily an understanding between
7 the permitting agency and the applicant as to what
8 constitutes a complete application.

9 That is one of the reasons why the
10 preapplication discussions are very important so
11 that the ground rules are set between the
12 applicant and the agency as to what the applicant
13 should provide in the application.

14 Theoretically, if no written
15 determination is made concerning whether the
16 application is complete, the application is deemed
17 complete. We found that this isn't happening in
18 practice, but at least theoretically, this is what
19 is supposed to occur.

20 The applicant, if the application is
21 determined to be incomplete, the applicant can
22 resubmit the application and the same time periods
23 apply to the first and second submittals.

24 If the application is still rejected
25 after the second resubmittal, the completeness

1 determination rejection can be appealed by the
2 applicant. At that point, a written decision
3 should be made by the agency within 60 days as to
4 whether or not the application is complete.
5 Again, this is an area where the California Permit
6 Streamlining Acts sets timelines that should be
7 applied to the determination of the completeness
8 of an application.

9 We found that two important acts that
10 govern the permitting process are, of course, the
11 CEQA process and the California Permit
12 Streamlining Act. The CEQA process is supposed to
13 insure that state and local agencies consider
14 environmental impacts of projects. Projects that
15 are not exempt are -- excuse me, projects that are
16 not exempt, should be analyzed by a lead agency to
17 determine the environmental impacts.

18 The CEQA process applies to the air
19 permit, the authority to construct process, and
20 also to the conditional use permit process. Those
21 are the two processes that we found to be the
22 critical paths with respect to permitting
23 petroleum product storage facilities.

24 A lead agency is determined in part by
25 what types of permits are required for the

1 facility. In the event that a local permit needs
2 to be issued such as a conditional use permit, the
3 local agency issuing the conditional use permit,
4 will become the lead agency with respect to the
5 sequel process. If the local process is not
6 needed then the local air district will become the
7 lead agency with respect to the CEQA process.

8 A lead agency is the agency that has
9 principal responsibility for the entire process.
10 There are also responsible agencies, they are
11 responsible for issuing specific permits for the
12 facility.

13 Under the CEQA process, the lead agency
14 is required to prepare either a notice of
15 exemption, if the project is exempt from CEQA, the
16 negative declaration or an environmental report.

17 After each one of these has been
18 completed, they are subject to public review,
19 process public hearings, and appeals. We found
20 that the appeals process is another area of
21 bottleneck with respect to getting a permit for a
22 storage facility. What we've found is that the
23 appeals process is not covered by any existing
24 timelines. The appeals process can theoretically
25 go on indefinitely. What we have also found is

1 that local agencies can get appeals from a
2 stakeholder for a particular issue. They go
3 through the appeals process. The stakeholder can
4 then come back with a second issue to start
5 appeals process over again. What we have found is
6 that there is no controls, necessarily, on how
7 long the appeals process can last.

8 The other act that controls the
9 permitting process, at least theoretically, is the
10 Permit Streamlining Act. The Permit Streamlining
11 Act sets timelines for approvals of permits by
12 public agencies. This includes the CEQA process,
13 includes air permits, and it includes local
14 permits that are issued.

15 When the California Permit Streamlining
16 Act was initiated, there was also initiated an
17 Office of Permit Assistance within the state which
18 was supposed to coordinate the implementation of
19 the act. What we have found is that the Office of
20 Permit Assistance formerly had 14 locations
21 throughout the state, but currently is down to
22 only one location, and that agency is apparently
23 being closed.

24 We see that there is a particular agency
25 within the state that is designated to implement

1 the Permit Streamlining Act. What we have found,
2 in terms of doing the interviews, is that many of
3 the people that we have interviewed are unfamiliar
4 with the act, and several people that we have
5 interviewed believed that the act contained
6 guidelines within the statutory requirements for
7 timelines for permits.

8 What we have found is that the Permit
9 Streamlining Act is not necessarily being
10 implemented thoroughly throughout the state. That
11 is one of the things that constitutes one of our
12 recommendations. With respect to establishing the
13 Permit Streamlining Act is an act that does, in
14 fact, control how the permit process is conducted.

15 The Permit Streamlining Act applies to
16 permits where local agency discretion is involved.
17 These include variances, the conditional use
18 permit that we talked about, subdivision plans,
19 and other things relating to land use.

20 Actions by local agencies where agency
21 discretion is not involved, such as zoning
22 ordinances, are not covered by the Permit
23 Streamlining Act. The Permit Streamlining Act
24 also as we discussed does not apply to the appeals
25 process which is something, you know, that can

1 extend the permit timeline far beyond what the
2 Permit Streamlining Act anticipates will occur.

3 Under the Permit Streamlining Act, this
4 is what the CEQA timeline looks like. When you
5 have a complete application, the first thing that
6 is prepared is an initial study which determines
7 the applicability of CEQA. Either you determine
8 notice of exemption of an exempt project, a
9 negative declaration for a project with which the
10 environmental impacts can be mitigated, or a full
11 environmental impact report. These timelines that
12 you see are the timelines that are established by
13 the Permit Streamlining Act for the CEQA process.

14 As I said, these timelines don't
15 necessarily correspond to what the applicant's
16 informed us as to what they are experiencing with
17 respect to going through the CEQA process for
18 petroleum product storage facility.

19 MS. JONES: Is there a timeline
20 associated with the initial study?

21 MS.CACHO: Thirty days.

22 MR. LANZA: Yes, the timeline for the
23 initial study is ten days. I'm sorry, thirty
24 days. Thank you.

25 Based on our interviews and based upon

1 researching the regulatory process, we found that
2 there were several critical paths to permitting of
3 petroleum product storage facility. These include
4 the air permit process, the land use permit
5 process, and the conditional use permit for siting
6 and expanding facilities on land that is not zoned
7 for heavy industrial use.

8 What we have found is that there is a
9 geographic distribution of which critical path
10 most affects the process. In Southern California,
11 the air permit process is the process that most
12 affects how long it takes to get all the permits
13 in place for a facility.

14 In the Bay Area, it's not the air permit
15 process that is the controlling factor, it is more
16 the of the building permit and land use permit
17 process. That is partially a function of the
18 regulations, the South Coast air regulations are
19 more stringent in the Bay Area, and the Bay Area
20 land use regulations appear to be more stringent
21 than the land use regulations in Southern
22 California.

23 We found, depending on the geographic
24 location of the applicant, they were telling us
25 different things concerning what permits they were

1 having the most difficult time procuring.

2 There are a lot of other permits that
3 are needed for petroleum product storage facility.
4 We found that most of those do not represent a
5 critical path permit, that those permits are
6 relatively routine, those include the construction
7 related permits, fire code permits, etc. Those
8 are things that the permit applicants said were
9 relatively routine permits to get, and that the
10 air permits and the conditional use permits really
11 control the process.

12 With respect to land use permits, the
13 conditional use permit was the permit that most of
14 the applicants that we talked to said was the most
15 significant problem with respect to going through
16 the entire process.

17 One of the things that we found is that
18 land was zoned heavy industrial when existing
19 facilities were sited, may have been down zoned
20 over time, and when the existing facility wants to
21 expand, and they are no longer surrounded by heavy
22 industrial use zoned property. Therefore, they
23 have to go through the conditional use permit
24 process. If the land around the facility had not
25 been rezoned to light industrial or elsewhere,

1 then a conditional use permit would not be
2 required, and the number of local permits that
3 would be needed would not be significant.

4 One of the other things about
5 conditional use permits, being that they happen at
6 the local level, they are more subject to
7 neighborhood opposition than an air permit might
8 be, which happens at the district level.

9 One of the things that we concluded is
10 that to the extent possible, conditional use
11 permits, if you can avoid having to get a
12 conditional use permit, you can speed up the
13 permit process pretty significantly.

14 The other thing applicants told us with
15 respect to the local permitting process is that
16 building permits can be a significant source of
17 delay in the process. These include zoning
18 permits, safety permits, and other things that
19 have to do with local ordinances and regulations.

20 A lot of the applicants told us, 30
21 percent of them told us that they had a problem
22 with the process for issuing building permits
23 because they would be submitting building permit
24 applications to local agencies, and local agencies
25 would come back after a significant amount of

1 time, indicate to them that a certain part of the
2 application that they needed was no longer --
3 could no longer be found.

4 Now the permitting agencies conversely
5 told us that in a lot of cases, the applicants
6 aren't submitting complete applications, so we
7 identified as part of the process, that the
8 agencies and the permit applicants are not
9 necessarily communicating with one another
10 concerning what is needed for a complete
11 application on the local permit side, and also the
12 applicants, at least, identified that the agencies
13 are not necessarily managing the permit process in
14 an efficient manner with respect to having to come
15 back to them, you know, two or three months after
16 the process begins and ask for another particular
17 piece of information that the applicant believes
18 has already been submitted.

19 The other thing that the applicants
20 identified is that with respect to local agencies,
21 they are getting a very large engineering
22 application. The applicants identified the need
23 for training of local agencies with respect to how
24 to review these applications from a technical
25 standpoint with respect to petroleum product

1 issues.

2 The other things that the applicants
3 identified was a lack of understanding on the part
4 of the local agencies in terms of what codes and
5 ordinances apply to petroleum product storage
6 facilities. The permitting agencies also told us
7 the same thing, that the applicants don't
8 understand the applicability of local codes and
9 regulations.

10 We identified a communications problem
11 with respect to both the applicants and agencies,
12 not necessarily understanding the process.

13 With respect to air permits, air permits
14 were another permit that represented a critical
15 path with respect to getting all the permits in
16 place for a petroleum product storage facility.

17 In general, any expansion of an existing
18 facility or siting of a new facility will require
19 an air permit. The three principal parts of the
20 process with respect to permitting timeline we
21 found were the best available control technology
22 requirements, new source review requirements, and
23 also emission reduction credits.

24 We found the applicants indicated that
25 the best available control technology is what they

1 described as a moving target that they could enter
2 the process with some understanding of best
3 available control technology, and that could
4 change as the permit process progresses. That is
5 something where when you are applying best
6 available control technology, you are basically
7 applying an engineering design. Two or three
8 months into the process, that engineering design
9 target changes, that can create a lot of delays
10 with respect to having to redesign part of the
11 facility.

12 The other thing applicants mentioned to
13 us is that the new source review definitions of
14 deminimus levels are not necessarily clearly
15 defined and clearly understood, so they would go
16 into the process with some understanding of what
17 the new source deminimus level would be, and that
18 would be redefined or reinterpreted as the process
19 progressed.

20 Based upon interviews with the
21 applicants, this is the information they provided
22 to us concerning their actual experiences with
23 respect to how long it takes to get each of these
24 critical path permits. The darker lines indicate
25 the minimums that the applicants indicated to us,

1 and the lighter lines indicate the maximum time
2 that the applicants indicated was required to
3 obtain a permit.

4 Part of the variability here is the type
5 of facility that is being permitted, whether it is
6 an existing facility or an expansion, but you can
7 also see there is quite a bit of variability here.

8 One of the things we identified is that
9 the extent to which there is uncertainty with
10 respect to the permitting process, the applicants
11 are somewhat less likely to take actions with
12 respect to siting facilities and expanding
13 facilities. The more uncertainty there is with
14 respect to how long the permitting process will
15 take, you know, from a financial standpoint there,
16 trying to plan when they are going to get the
17 facility on line, they can't necessarily put a
18 series of error bars around that because of the
19 fact that large parts of the process are
20 uncertain.

21 COMMISSIONER GEESMAN: If I look at your
22 chart there, it would seem that despite the other
23 things that you have said about the air permits,
24 the timing uncertainty seems to be less as it
25 relates to the authority to construct, than with

1 respect to permits that may largely be subject to
2 local government decision making.

3 MR. LANZA: That's certainly one of our
4 findings, but again, there is some geographic
5 differences here with respect to how things occur
6 in Southern California versus how things occur in
7 the Bay Area and Northern California, but, yes,
8 the local permits do have an extended timeline.
9 That is in the applicant's information, largely
10 because of the way the appeal process is operated
11 rather than just how long it takes to get a
12 complete application and an initial determination.

13 Once they enter in the appeals process,
14 the level of uncertainty increases pretty
15 dramatically.

16 COMMISSIONER GEESMAN: Is there the same
17 concern about staffing levels or staffing
18 capabilities at the air districts compared to
19 local governments?

20 MR. LANZA: There's some what less
21 concern about capabilities, there's a similar but
22 not as serious concern about staffing levels.
23 What we have found with respect to the applicants,
24 is that the air districts have more of a
25 background in petroleum issues because they do

1 petroleum issues more routinely than a local
2 government will.

3 A local government might only see one of
4 these or two of these where the district see them
5 more frequently, so the capabilities we didn't
6 have as much input with respect to the air
7 district, but certainly staffing levels are a
8 universal problem.

9 COMMISSIONER GEESMAN: In general, what
10 number of project applications are we talking
11 about, say per year?

12 MR. LANZA: We didn't look into the
13 total number of applications, what we did here was
14 a survey, and not everyone we talked to got back
15 to us. Most of the people we talked to from the
16 applicant side had gone through one or two of
17 these processes recently, and that is the
18 information they provided with respect to the one
19 or two permit processes that they had gone
20 through.

21 We found in some cases for some of the
22 local agencies that they had only gone through
23 this once.

24 COMMISSIONER GEESMAN: Thank you.

25 MS. BAKER: What are the two different

1 grades there in the -- you've got two different --

2 MR. LANZA: The darker color is the
3 minimum timelines that the applicants described to
4 us with respect to how long the process takes, and
5 the lighter lines are the maximum timelines that
6 the applicants experience in getting the various
7 applications completed and permits issued.

8 We interviewed both applicants and
9 permitting agencies and we used slightly different
10 questions as we described previously as to what
11 kind of information we were trying to get from
12 them, and with respect to the applicants, the
13 applicants had quite a bit to say concerning the
14 land use permitting process.

15 They identified on the part of the
16 agency's lack of understanding of CEQA
17 applicability. One of the things they said is
18 that in their view, the local agencies always come
19 out of the gate assuming that every project,
20 whether it be an expansion or new facility
21 requires a full EIR, and that is not necessarily
22 the case.

23 We also found some of the applicants
24 told us that the agencies were indicating that we
25 know your particular project might not require a

1 full EIR, but if we make a negative determination,
2 then that could be appealed, so if you just go
3 into the full EIR process, then you could perhaps
4 avoid one round of appeals. What they are doing
5 is kind of leap frogging over the negative
6 declaration or recommending that process occur to
7 try to avoid one round of the appeals process, and
8 again, the appeals process is a very uncertain
9 thing.

10 We are finding that the applicants in
11 some cases are indicating that EIR's are being
12 suggested for projects that they might not be
13 required for.

14 Again, the applicants also mentioned to
15 us, particularly at the local level, that agency
16 staff are not experienced in dealing with
17 applications that have large amounts of
18 engineering drawings that involved petroleum
19 storage issues.

20 The other thing that the applicants
21 pointed to is a duplication of effort with respect
22 to the environmental studies. One of the things
23 that we found is that the local agencies will
24 contract with a contractor to prepare an EIR, and
25 in order to influence the schedule and influence

1 the permitting process, the applicant is also
2 contracting with a different consultant to prepare
3 an EIR. In some cases we are seeing that two
4 EIR's are being prepared for one particular
5 project by two different consulting firms, both
6 ultimately funded by the applicant.

7 An EIR for a full scale new facility
8 could cost \$250,000, so we are finding a large
9 duplication of effort in some cases with respect
10 to preparation of EIR's. That is something that
11 we recommend that be looked into with respect to
12 how to streamline the process so that in all
13 cases, one EIR rather than two EIR's be prepared
14 for a particular project.

15 The other thing that we found the
16 applicants told us is that, you know, they have
17 had to change the scope of their project pretty
18 far down in the permitting process with respect to
19 the agencies coming back to them and asking for
20 things that the applicant says they didn't ask for
21 at the beginning of the process. Again, we are
22 back again to the communication issue with the
23 applicant and the agency are not sitting down at
24 the beginning of the process and setting out the
25 ground rules as to what is it that is going to be

1 required with respect to getting a complete
2 application and getting a permit.

3 The Permit Streamlining Act actually
4 addresses this issue, and says that the permitting
5 agencies are supposed to develop check lists as to
6 what goes into an application and how the
7 application will be reviewed. We are finding that
8 this is not necessarily being done with respect
9 to, you know, the agencies communicating with the
10 applicants with respect to setting up what goes
11 into an application, what are the criteria for
12 completeness, and what are the criteria for
13 getting a permit.

14 On the part of the agencies, the
15 agencies also commented that they did not think
16 that the applicants had a full understanding of
17 CEQA applicability. The agencies seem to be
18 defaulting toward requiring an EIR for projects
19 even when an EIR may not be needed. Some of their
20 comments in the interviews indicated that was the
21 case.

22 They also indicated, you know, fairly
23 universally that one of the problems with the
24 process is that applicants don't submit complete
25 applications, and that they have to go back and

1 continually ask for additional pieces of
2 information in order to get what the agency
3 considers to be a complete application.

4 With respect to building permits, again,
5 a similar comment from the applicants concerning a
6 lack of understanding concerning the applicability
7 and interpretation of local codes. They also
8 indicated that there was redundancy with respect
9 to how the review process is conducted.

10 In general, what we found is that local
11 agencies are supposed to form a design review
12 committee, which involves all of the appropriate
13 departments within the local government to review
14 the application. What the applicants are telling
15 us is that design review committee is not
16 necessarily all encompassing. Where at some point
17 in the process, one agency department that was not
18 part of the process originally, is entering the
19 process and saying well, okay, we have these
20 issues concerning the application where they were
21 not part of the initial design review committee.

22 The applicants also told us that at
23 times they have gotten into complex negotiations
24 with the local governments concerning
25 applicability of codes. Again, you know, part of

1 the process here is that there seems to be a lack
2 of understanding on the part of the agency and on
3 the part of the applicant concerning how the codes
4 apply to petroleum product storage facilities.

5 The reason for this might be that the
6 codes involved are not necessarily written for a
7 petroleum products storage facility, they might be
8 general regulations that the agency is trying to
9 apply to petroleum product storage facility. That
10 creates some gray areas that need to be
11 negotiated.

12 The applicants also indicated that in
13 some cases, agencies do set timelines for how the
14 permit process is going to occur and then they
15 don't follow them, which again, if you are
16 planning a project, and the agency indicates
17 there's a timeline for permitting, and then that
18 timeline is allowed to slip, that makes the
19 planning process for purposes of constructing a
20 facility that much more difficult.

21 With respect to the agencies, the
22 agencies came back with the same comment on the
23 part of the applicant with respect to
24 understanding of the process. The agencies also
25 indicated that, in their view, the early contact

1 between the applicant and the agency is critical
2 with respect to avoiding issues coming up, you
3 know, during the permitting process.

4 With the respect to air permits, there
5 were comments concerning agency staffing and
6 training more in with respect to the number of
7 staff that the agency has to review the
8 applications.

9 One of the things that the applicants
10 commented on with respect to air permits is that
11 in some cases the air district is sending the
12 applications out to contractors for review. The
13 contractors in some cases, according to the
14 applicants, are coming back with comments that are
15 outside the scope of the project and comments that
16 the air district themselves would not necessarily
17 have come back with.

18 The applicants think that the consultant
19 reviews, in some cases, expands the scope of the
20 project.

21 COMMISSIONER GEESMAN: That comment
22 applies either to the Bay Area District or the
23 South Coast District or both?

24 MR. LANZA: I think that comment applies
25 to both.

1 MS. CACHO: Mostly the South Coast.

2 MR. LANZA: Mostly to the South Coast.

3 COMMISSIONER GEESMAN: Any other
4 districts included in that comment, San Joaquin,
5 or --

6 MS. CACHO: San Diego.

7 COMMISSIONER GEESMAN: San Diego.

8 MR. LANZA: San Diego, yes.

9 COMMISSIONER GEESMAN: Thank you.

10 MR. LANZA: The other comment that the
11 applicants had concerning air permits is that they
12 indicated some uncertainty with respect to
13 interpretation of the new source review de minimus
14 rules. Again, that is something that affects the
15 permit process when the interpretation changes
16 over time and is not fully set out early in the
17 process.

18 The applicants also had the same comment
19 concerning BACT issues. In a number of cases, the
20 applicants told us that they did not have full
21 approval of their BACT, and they are going through
22 the permitting process, and in some cases the
23 applicants had to initiate legal action with the
24 agency to get their BACT reviewed and approved as
25 the process was going on, rather than the

1 situation that you would like to have where BACT
2 is approved at the beginning of the process
3 because BACT is a design issue.

4 When you have a question concerning
5 interpretation of BACT, after you have gone
6 through your first round of your permit
7 application, that didn't necessarily involve
8 design changes in your facility. That is
9 something you don't necessarily want to have with
10 respect to having a permitting timeline that
11 everybody agrees to.

12 With respect to air permits, they are
13 seeing in some cases that companies are applying
14 technologies, specifically to their facilities, in
15 order to create an emission reduction credits.
16 Those extensively voluntary technologies that are
17 being applied for the purposes of generating
18 emission reduction credits, are becoming BACT for
19 everyone, even though they are being applied on a
20 voluntary basis. That is something that can also
21 affect the permitting process. Those sorts of
22 interpretations change as the permit process is
23 going on.

24 The other thing the agencies comment
25 that the applicants commented on is that the

1 agencies could not necessarily provide
2 documentation of why they thought BACT was what it
3 was.

4 Again, the worse case scenario here, is
5 that the agency and the applicant get into
6 litigation concerning the definition of BACT
7 during the permitting process because there is no
8 firm documentation on the part of the agency with
9 respect to what BACT actually is.

10 On the agency side, the agencies also
11 commented with respect to staffing issues that
12 they don't have the staff they need and don't have
13 funding to increase the amount of staff they have.

14 They also commented that they have
15 trained and experienced staff, but they cannot
16 necessarily keep them within the agency. That
17 they sometimes go elsewhere, and that's a funding
18 problem also.

19 The South Coast District also gave us
20 information concerning their permit streamlining
21 task they issued in 1999 with respect to improving
22 the permitting process. They developed a number
23 of recommendations, a lot of which were
24 implemented. These include standardizing the
25 permit applications, improving interaction with

1 the air district permitting entities, and the
2 other departments within the district.

3 They also established a permit by rule
4 for certain types of permits, which also
5 streamline the process. They also initiated a
6 prioritization of permits for review, so that they
7 examine all the permits and prioritize them with
8 respect to which ones get reviewed first.

9 They also established a permit ombudsman
10 with respect to addressing issues with the
11 permitting process as they arise.

12 MS. JONES: Excuse me, it says that
13 timelines were improved. Do you know the
14 magnitude of that?

15 MR. LANZA: We don't. We don't have any
16 information from them concerning the numbers.
17 They told us that permitting timelines were
18 improved, but they weren't able to give us any
19 quantitative information concerning that.

20 We developed a number of recommendations
21 concerning the interview process and concerning
22 our research process. Our first recommendation,
23 which is kind of a universal one, is concerning
24 staff training and technical assistance at the
25 local level and also at the air district level.

1 Primarily at the local level, the
2 applicants identified the need for training with
3 respect to petroleum product storage facility
4 issues with respect to local agencies reviewing
5 permit applications.

6 Further recommendation that we had was
7 with respect to discretionary decision making on
8 the part of local jurisdictions. One of the
9 things we found was that interpretations of codes
10 and ordinances varied quite a bit between local
11 jurisdictions and that's not necessarily because
12 the ordinances and codes themselves differ. It
13 has much to do with the people that are
14 interpreting them.

15 One of the things that we are
16 recommending is that some guidelines be developed
17 concerning how local governments interpret codes
18 and ordinances with respect to discretionary
19 decisions, so that there is some boundaries in
20 which the local governments can function.

21 The other recommendation we had with
22 respect to the environmental review process under
23 CEQA is that there should be an investigation as
24 to methods to eliminate the practice of having two
25 EIR's or two other environmental reviews being

1 prepared for the same project, both funded by the
2 applicant involving two different consultants.

3 With respect to that process, there are
4 methods of doing so where one environmental impact
5 report or other document could be prepared under
6 the jurisdiction of the agency funded by the
7 applicant, and all parties are involved in that
8 process rather than having two parallel processes
9 going on at the same time.

10 Our view here is not to limit, you know,
11 the amount of public input with respect to the
12 CEQA process, but to streamline the process such
13 that only one set of reviews are occurring rather
14 than two.

15 The other series of recommendations we
16 have is concerning, you know, establishing
17 timelines and ground rules for the permitting
18 process early in the process with respect to
19 communications between the applicant and the
20 permitting agencies.

21 This would involve all the permitting
22 agencies under the preview of the lead agency, so
23 that ground rules for what constitutes a complete
24 application, what is the anticipated timeline for
25 the completeness determination, and the

1 anticipated timeline for issuance of a permit are
2 understood in advance by both parties. Also, the
3 amount of information that is required by the
4 applicant and the types of information are also
5 understood as the process starts, rather than
6 additional interpretations and additional
7 questions concerning the process as they arise as
8 the process goes forward.

9 The other thing we are recommending, and
10 this may be out of scope because it is a judicial
11 process, is how the appeals process works,
12 particularly the instances that the applicants
13 provided to us concerning multiple appeals where
14 stakeholders are entering the appeals process for
15 a particular issue, the appeal process concludes,
16 then they come back into the process with a
17 different issue, actually going back into the
18 appeal process more than once. That is something
19 that may need to be addressed at the judicial
20 level, but, you know, enough of the applicants
21 indicated that this was a situation that is
22 something that may need to be addressed.

23 Another thing that we are recommending
24 with respect to permit streamlining is to create
25 situations where conditional use permits can be

1 voided, and the way to do that is to create
2 additional heavy industrially zoned property that
3 new facilities can be constructed on or existing
4 facilities can be expanded. If you are going from
5 heavy industrial zoned land to land that isn't
6 zoned heavy industrial, you need a conditional use
7 permit. That is something that the applicant
8 pretty universally, who had been involved in the
9 process, said that was something that was very
10 time consuming and had a lot of uncertainties
11 associated with is. In the event that those types
12 of permits can be avoided, that would streamline
13 the process to some great extent.

14 Another recommendation we had with
15 respect to ordinances is that the ordinances at
16 the local level do not necessarily explicitly
17 refer to petroleum product storage facilities or
18 how local ordinances apply to them. That is a
19 comment that we had from both the applicants and
20 the agencies concerning a lack of understanding of
21 the applicability of local codes and ordinances to
22 petroleum product storage facilities.

23 If some effort can be made to
24 standardize how those codes and ordinances apply
25 and to better define how they apply at the local

1 level, then you can eliminate some of the
2 uncertainties when the applicant comes into the
3 agency and says we want to do "X" and "X" is not
4 necessarily explicitly identified with respect to
5 the codes and ordinances.

6 With respect to applicants,
7 recommendations for the applicants include
8 involvement early on in the process with
9 stakeholders, including identification of who the
10 stakeholders are and getting the stakeholders
11 information early on in the process is to affect
12 that the applicant is intending on applying for a
13 permit to do an expansion or to construct a new
14 facility.

15 One of the things that occurs, is that
16 applicants -- with applicants, is that if
17 stakeholders start entering the process as the
18 process is going on, that can create uncertainties
19 and extend the process rather than to follow the
20 stakeholders or identified and be apprised of the
21 nature of the project early on in the process.

22 The other recommendation we had with
23 respect to permitting was more universal
24 preapplication meetings between applicants and
25 agencies where the applicant doesn't decide to

1 permit a facility or expand a facility, do a lot
2 of work, and then come to the agency and say,
3 here's our idea because the agency does not
4 necessarily have the same idea concerning the idea
5 as the applicant does, so rather than the
6 applicant getting fairly far down the road with
7 respect to designing their project, a
8 preapplication meeting can save a lot of time with
9 respect to the applicant having to go back and do
10 things they have done once already.

11 Another thing that we are recommending
12 is that agencies and applicants do develop a
13 timeline for permitting early on in the process
14 and that timeline be tracked as the permit process
15 goes forward.

16 What we are recommending more is that
17 permit processes be managed as projects so they
18 have a timeline, they have a schedule, they have a
19 scope of work, so that there is more of an
20 understanding up front in the process as to what's
21 going to happen to eliminate some of the
22 uncertainties that lead to these extended
23 permitting times.

24 Part of that involves a definition of
25 what constitutes a complete application. That is

1 one of the things that applicants commented on
2 pretty universally is that, you know, there is an
3 understanding going into the process as to what
4 constitutes a complete application and what the
5 criteria the agency is going to use with respect
6 to deciding when an application is complete.

7 A similar comment for BACT to establish
8 early on in the process what constitutes BACT is
9 that the interpretation doesn't change as the
10 process goes forward.

11 We are also recommending with respect to
12 siting of new facilities that detailed siting
13 studies be conducted with respect to where these
14 facilities should be placed rather than having
15 applicants decide to put them in places where they
16 may not necessarily be the best place. That
17 includes zoning issues, that includes air
18 permitting issues, it includes stakeholder issues.
19 They actually go through a more formal process as
20 to where these facilities might be constructed.

21 We have a few recommendations concerning
22 the Permit Streamlining Act, one of which is the
23 fact that there doesn't seem to be a statewide
24 authority with respect to implementing the act,
25 and we think that implementation of the act can

1 affect the permitting timelines in a significant
2 manner.

3 The Permitting Streamlining Act requires
4 that agencies set out timelines with respect to
5 the permit process, and applicants and agencies
6 both told us that those timelines are not
7 necessarily being followed. If there was a
8 particular entity within the state that was
9 mandated to track this process, that would
10 certainly be helpful with respect to reducing the
11 permitting time.

12 There is also a unified permit program
13 that applies to hazardous waste facilities among
14 others, and it might be useful to investigate
15 whether that type of process can be applied to
16 petroleum product storage facilities as well.

17 In conclusion, with respect to
18 permitting, the most significant conclusion is
19 with respect to the communications process between
20 agencies and applicants throughout the process and
21 particularly at the beginning of the process, to
22 establish a timeline, and to the extent possible,
23 keep to the timeline throughout the process.
24 Again, more of a project management approach to
25 permitting.

1 The other conclusions is that the CEQA
2 process is the really critical path process with
3 respect to permitting these facilities, more so
4 even than the local permitting process.

5 Finally, the Permit Streamlining Act
6 should be implemented with a particular entity and
7 agency within the state.

8 PRESIDING MEMBER BOYD: Thank you very
9 much for that presentation, and we are about ready
10 to open it up to questions. I would like just to
11 make a few comments and observations.

12 First I want to commend you on what I
13 think is an excellent piece of work, your chart
14 with the petroleum product storage issues, and I
15 appreciate you. That was our responsibility, that
16 was the task that we gave you, but your findings I
17 think, those of us who have been around a while,
18 would see that your findings are kind of relevant
19 to a much larger spectrum of projects than just
20 petroleum project storage issues.

21 I think your work makes a contribution
22 to this issue getting reviewed yet again, I'm
23 afraid, for people like me who have been around
24 for a while, this is another case of deja vu all
25 over again.

1 I can't tell you the number of years
2 I've heard these kinds of issues laid out, and it
3 is almost embarrassing to me as a long term member
4 of government that they can't get fixed. That
5 seems to be the case, and I think we will
6 certainly direct this study in the direction of
7 other agencies for their information.

8 With regard to our specific charge here,
9 I'm anxious to hear comments from the petroleum
10 industry as to whether if we fixed all these
11 issues, if we swept aside all the issues, whether
12 they would build more petroleum products storage
13 facilities. I think that is a key question to
14 what we are interested in, but that's a separate
15 question.

16 With regard to your work, I see my
17 friend Harold Holmes sitting in the audience from
18 the Air Board, and some people know I have a
19 little bit of experience in that area, and I'm
20 confident when faced with an issue, the air
21 community can kind of pull it together and work on
22 these things. I hope and trust Harold will take
23 this back to the Air Board, and they will work
24 with CAPCOA and other air districts and what have
25 you and maybe see that this is an arena that needs

1 to be addressed much broader than just petroleum
2 product storage issues.

3 In a sense, it is so much broader, it is
4 an area where there can be a public private effort
5 undertaken to maybe address this. There are other
6 state agencies who need this brought to their
7 attention, perhaps the administration, it's a
8 terrible time to bring issues like this up in
9 terms of the status of the state budget, but I
10 also happen to know the legislature has never been
11 anxious and has slowly defunded the attempts that
12 state government has had in creating permit
13 streamlining efforts and offices and what have
14 you. I won't comment on their success or failure,
15 but there has been attempts to address this, and
16 maybe it needs to be addressed again.

17 In any event, should product petroleum
18 storage facilities be an issue that needs to be
19 addressed, I know this agency and the Air Board
20 and the network of people involved, CAL EPA and
21 what have you, will jump to address the issue as
22 they have in the past. I can recount the many
23 many card one, card two, etc. etc. where these
24 kinds of issues have been addressed.

25 The thing that I have seen throughout my

1 long career and then recently when, you know, the
2 state did power plants siting, and thank God this
3 agency has a more streamlined process to address
4 that, but power plants under 49 -- under 50 Mw,
5 they fell into the local permitting process. A
6 state green team was formulated to help address
7 this which I served, and once again, I was
8 reminded of the incredibly long field of hurdles
9 that people have to go over. A big part of that
10 is the local government, a lot of state agencies
11 can kind of get their stuff together once in a
12 while and work this out.

13 Trying to wrestle with the huge number
14 of local government agencies that deal with this
15 is a major task that is probably beyond our
16 ability to solve, but maybe not our ability to
17 address. Anyway, this took me down a long
18 historical road of having been there. You have
19 done a good piece of work for us, and probably for
20 the whole issue.

21 MR. LANZA: Thank you.

22 PRESIDING MEMBER BOYD: Now, maybe Mr.
23 Geesman has some comments and we can get,
24 hopefully, some comments and questions from the
25 audience.

1 COMMISSIONER GEESMAN: I went through a
2 bit of a Rip Van Winkle experience, not so much
3 deja vu all over again, but I was out of the
4 process for about twenty years, having been at the
5 Energy Commission in the late '70's and early
6 '80's and some familiarity with our siting process
7 then, and then having come back last summer, and
8 have been immersed in the power plant siting
9 process since and recognizing a fairly significant
10 transformation of that process.

11 I guess I would question the realism of
12 most of the recommendations directed toward
13 improving the local government process in the
14 context of budgetary retrenchments that are now
15 truly unprecedented and that I think will
16 invariably ripple down to local governments that
17 are responsible for reviewing these applications.

18 I don't want to willingly jump into the
19 briar patch, but I would certainly challenge the
20 industry trade associations that may not have
21 quite the personalized nature of good neighbor
22 concerns that the individual companies do.

23 To question whether it makes any sense
24 to have the existing focus on these permit
25 decisions be made at the local level, if these are

1 facilities that truly do have statewide impacts.
2 Do they lend themselves to the type of coordinated
3 permit process that power plants above 50 Mw
4 currently have.

5 I'm not advocating that there be any
6 change in the status quo, but given the number of
7 problems that this study identified, I would be
8 curious as to whether the trade associations feel
9 that such a change would be merited.

10 PRESIDING MEMBER BOYD: I'm glad you
11 brought that up, I think some local air districts
12 know where I live and would string me up if I
13 brought it up.

14 (Laughter.)

15 PRESIDING MEMBER BOYD: It is a valid
16 question, and I appreciate you bringing that up.
17 Now, please, audience, comments, questions. Some
18 of you a challenge has been thrown out, is this an
19 issue worth pursuing.

20 MR. SPARANO: Yeah, I guess there was a
21 challenge, and I think I am wearing the target.
22 My name is Joe Sparano, I'm President of the
23 Western States Petroleum Association, which is one
24 of those associations that Commissioner Geesman
25 was referring to.

1 From my perspective as a thirty-four
2 year petroleum industry, I guess, veteran would be
3 a decent word. The permitting process in
4 California has been the most difficult mechanism
5 to work through in order for private industry to
6 reinvest or just to invest in the State of
7 California and to create jobs.

8 The process is broken from my
9 perspective. Can it be fixed by eliminating or
10 moderating the local level, I don't know. If it
11 is fixed, I'm not even sure that I could assure
12 that individual companies would invest. What they
13 do need is some assurance from the state in the
14 form of, I think, severe permitting process
15 modifications that would streamline the process in
16 order to even contemplate reinvesting in
17 California.

18 We are here to talk, in part, about
19 strategic fuel reserve, about price spikes, which
20 is of concern to all of us. One of the real
21 difficulties in addressing a price spike is having
22 capacity to make up a difference when there is a disruption.

23 I've worked through fifteen years in
24 California and personally been involved in the
25 permit process to the extent that I would like to

1 share something that is anecdotal, but sadly very
2 true.

3 I was CEO of a small company from 1990
4 to 1995, that company was headquartered in Long
5 Beach and had a refinery in Hercules in the Bay
6 Area. The refinery admittedly had a poor
7 operating record, there is no question about that.
8 We changed it, but it was poor for a long time.
9 We wanted to build simply the facilities that
10 would allow us make carb gasoline and diesel on
11 time.

12 For the partners that owned the company,
13 it was a stay in business decision because as
14 everyone knows who has been through those years,
15 if you couldn't make those products you couldn't
16 stay and play.

17 We spent millions of dollars, I
18 personally spent five years of my life traveling
19 back and forth to the Bay Area to integrate myself
20 to the CEQA process. We met more lawyers and
21 consultants, people helping us prepare the EIR,
22 which as the presenter said, often has some
23 multiplicity to it. We had local communities
24 justifiably concerned about additional facilities
25 next door to them when the prior facilities they

1 felt were a detriment to their quality of life.

2 We worked through all that to make a
3 very long story shorter. We worked through all
4 that, we made concessions, worked hard with the
5 adjoining neighborhood, the county, the city in
6 which the refinery was located, the labor unions,
7 the air districts, some state groups, the water
8 quality control district. We had agreements with
9 everyone, and at the end of the day, our lead
10 agency, the BAAQMD granted us a permit.

11 We got our conditional use permit,
12 permit to construct from the city, building
13 permits, and then one of our two partners decided
14 that it had been too much and they no longer
15 wanted to stay and play. 210 people lost their
16 jobs, the refinery is now a site for upscale
17 homes, which I suppose is a positive redevelopment
18 outcome, and maybe so in the eyes of the people
19 who had to live next door to it for a long time.

20 I think that illustrates the kind of
21 experience that each of the companies that we at
22 WSPA represent go through and what they have to
23 keep in mind. That was not the only company to go
24 down in that time frame, I think we lost several
25 hundred thousand barrels per day of refining

1 capacity. If you want ask yourself why are there
2 price spikes, why might we need a bit different
3 infrastructure, why don't we have enough product
4 all the time, keep that story in mind. I think it
5 is electritive.

6 I like your idea of trying to moderate
7 local permit interaction because the key to that
8 is you get multiple venues and each one of those
9 venues has a cadre of people and personalities
10 that want to get involved in the process. They
11 can and they should, that is why we have public
12 hearings. The whole purpose is to make sure the
13 projects are environmentally sound and safe for
14 the neighbors.

15 All of us who have ever operated a plant
16 believe in that because we breathe the air and
17 oftentimes, our families live nearby, so it is not
18 a simplistic issue to work through, but I do think
19 action at the local level combined with
20 streamlining at the agency level and at the state
21 level might give the industry pause to think about
22 investing what ranges from 100, 200, 300 million
23 to one or two billion dollars to build a new
24 plant.

25 Twenty-seven years since the last time a

1 plant was built in the United States, no
2 refineries in twenty-seven years. California has
3 lost capacity, even with what is called "Capacity
4 Creep" where refiners can add a little capacity
5 when the opportunity arises and they can get the
6 permits and go through the new source review
7 required to build a little amount, a small amount
8 of new equipment.

9 It is a difficult process in any
10 streamline that you commissioners can help put in
11 place, I think would make the playing field down
12 the road a lot more favorable for all of us.

13 I thank you for giving me the time to
14 say that, and if you have questions, I would be
15 happy to answer them.

16 PRESIDING MEMBER BOYD: Joe, if I may
17 call you that, you did set yourself up here for a
18 question. The bottom line today is petroleum
19 product storage facilities, and I appreciate your
20 message and bodies bigger than just ours have to
21 address this, but when it comes down product
22 storage facilities, and if we were able to sweep
23 all of these issues away, would the industry see
24 it in their economic interest to build additional
25 product storage facilities, or does that fit in

1 today's equation of products in California,
2 economics, and what have you.

3 MR. SPARANO: Jim, if I may call you
4 Jim, I guess both our moms call us Joe and Jim, so
5 it is probably okay.

6 (Laughter.)

7 MR. SPARANO: You know I can't answer
8 that for the companies, but what I can tell you is
9 that up till now, you have probably seen a
10 reluctance, even a dearth of any of that storage
11 capacity being built because the economics you
12 spoke of are near and dear to these publicly
13 traded companies that have shareholder's interest
14 to protect.

15 If it doesn't make sense, it doesn't
16 pencil out, it doesn't cover the cost of capital,
17 then that investment is not going to be forth
18 coming. If there is a change that would allow the
19 opportunity to be greater, the risk to be lower,
20 then one might enter into the process of
21 investment and find at the end of two, three,
22 four, five years that you still can't build, even
23 after you've spent millions of dollars, then there
24 might be an opportunity. Again, I can't speak for
25 the companies, that's my experience speaking, and

1 if I was the head of a company, that would mean
2 something to me.

3 COMMISSIONER GEESMAN: Are there other
4 states where you feel there is a more efficient
5 permitting process and a more efficient
6 relationship between state level authorities and
7 local permitting authorities?

8 MR. SPARANO: I have personally worked
9 at manufacturing facilities and managed them in
10 four states, New Jersey, Texas, California, and
11 Washington. I think only one of those stands out
12 in my mind as having perhaps a bit better
13 approach, perhaps a more moderate approach, and
14 that is Texas.

15 If there is a model there you can work
16 with, it might be advantageous to look at that,
17 and maybe you have already. I know the CEC has
18 been very active in trying to promote efficient
19 energy use and better things for the state, but
20 Texas, John, comes to mind as a place that really
21 has its act together, a bit better than some of
22 the other places that I've worked.

23 PRESIDING MEMBER BOYD: You don't mean
24 Houston, do you Joe?

25 (Laughter.)

1 MR. SPARANO: I had the --

2 COMMISSIONER GEESMAN: Which is a neck
3 and neck race with LA to be the worst air quality
4 place on the planet all the times.

5 MR. SPARANO: No, I had the good fortune
6 not to have to work in Houston, there are other
7 spots, but it is just one of them where a lot of
8 activity, a lot of heavy industry takes place.

9 PRESIDING MEMBER BOYD: Thank you.

10 MR. SPARANO: Thank you.

11 MR. HOFF: Hi, my name is Tony Hoff, I
12 work with ST Services, it's an independent bulk
13 liquids terminal company. We have large terminals
14 in the Bay Area, a small one in LA, other
15 terminals all over the country.

16 I can give you a real life example just
17 recently of how the permit affected a project we
18 have going on right now at our Martinez terminal.
19 We are right now about half way through building a
20 300,000 barrels of additional storage for gasoline
21 at our Martinez terminal.

22 When that project was first envisioned,
23 it was planned with plenty of time to be completed
24 by about now or actually earlier, about March of
25 this year. The design, the plan, the idea was to

1 have it completed before the transition from
2 winter to summer grade gasoline when the prices
3 tend to spike, and the whole project plan was to
4 be completed by then.

5 The local permit process delayed it by
6 about five months beyond our even conservative
7 expectation of when we thought we would be able to
8 get it completed. You could see the blood drain
9 from the faces of the people involved in this
10 project when we realized it was going to be
11 delayed beyond the point that the gasoline would
12 be able to come in time to take advantage of the
13 seasonal change.

14 I can tell you that if we had been able
15 to complete it in time, the recent price spike
16 that we just came through would have been lower.
17 It is hard to say how much lower, but it would
18 have been lower if the project had been completed
19 in time.

20 The result that was the whole economics
21 of the project changed, it is still working, we
22 are still going to complete the tanks and get it
23 done, but it's a whole different economic outcome.

24 To answer your question earlier, we
25 would be interested in building tanks, we would

1 like to build tanks in the Los Angeles area. We
2 have a small terminal in that market, but for
3 years we have been wanting to break into that
4 market and have found it difficult to find an area
5 and a way to do that.

6 MS. JONES: I have a question about the
7 particular case you are talking about, the
8 terminal in Martinez. How long did the total
9 permitting process take for that project?

10 MR. HOFF: It took about a year.

11 MS. JONES: It involved an EIR?

12 MR. HOFF: In that case, we were able to
13 use an old EIR, so we didn't have to go through
14 the CEQA process for that project.

15 MS. JONES: Thank you.

16 PRESIDING MEMBER BOYD: Thank you.

17 MR. WHITE: Jim White with White
18 Environmental Associates. I, too, would like to
19 echo Commissioner Boyd's compliments to the
20 contractor, very very good report.

21 I would like to observe from my
22 experience with permitting, that conditional use
23 permits, local agencies are very creative, many
24 times what they are applying on a conditional use
25 permit to has nothing to do with zoning, and it

1 further complicates the situation.

2 My main point here was that although I
3 hear your recommendations, and I can't
4 disapprove -- can't find any fault with them, I
5 think there ought to be greater emphasis placed on
6 the greater need for consistency out there.

7 Consistency is key. When you go out and
8 try to start a project, you've got to have as many
9 knowns as you can get, and in the permitting
10 process here in California, it's just full of a
11 lot of unknowns.

12 I might point out that this problem has
13 been handled in a -- well, it is being handled in,
14 so to speak here in California, on a lower scale
15 with regard to underground tanks and other local
16 permitted facilities, smaller facilities through a
17 process called Certified Unified Permitting
18 Agencies. CUPA.

19 There has been efforts to bring a little
20 bit more consistency into the permitting processes
21 that are taking place out there here in California
22 through the hundreds, literally, hundreds of
23 agencies that are handling these permitting
24 activities.

25 It might be something worth looking at

1 on a bigger scale. I just don't see how we can
2 get away from all these local agencies, they are
3 established, they're not going to give up the
4 authority for permitting, but if we can work --
5 "we" being the industry and the governments to
6 bring a little bit more consistency to the
7 permitting process, I think that would be a step
8 in the right direction.

9 PRESIDING MEMBER BOYD: Thank you.
10 Could I ask you a question? As a an experienced
11 veteran in the permitting arena, the earlier
12 reference to the fact that all previous attempts
13 to have any kind of state assistance in the Permit
14 Streamlining Act, implementation, etc., the old
15 offices of permit assistance, I believe they were
16 called -- I hate to put you on the spot like this,
17 but were they of value. I mean, did that help at
18 all, it has withered upon the vine --

19 MR. WHITE: Yes, I think they were well
20 intended, but as you point out, it's kind of
21 withered on the vine. I was a member of a task
22 force back in the early '90's that looked at
23 issues regarding permitting and other matters
24 related to retail gasoline stations and trying to
25 streamline the regulatory process for those

1 facilities. I can remember that was one of the
2 issues, why isn't there better application of this
3 streamlining act, and we ran into a brick wall.

4 A lot of these issues have been
5 discussed on various levels, and I think one good
6 attempt that has been made so far, is the
7 development of this CUPA process, and it is no
8 where near completion, and it started like three
9 or four years ago, maybe even longer than that,
10 but they are making steady progress and bringing
11 greater consistency to the permitting process and
12 the regulatory process as well. Thank you.

13 PRESIDING MEMBER BOYD: Thank you.
14 Anyone else? Tony.

15 MR. FINIZZA: Tony Finizza, consultant.
16 I also want to congratulate Bob and Mariella on
17 their report. I have a question of the authors
18 that might help explore whether this is actually
19 worse than you have portrayed.

20 I want to call your attention to Exhibit
21 9 in your report where you have an array of
22 permitting agencies by time it takes to get a
23 permit and delays, and I note that the state
24 agencies have fairly small time window and no
25 delays are indicated there.

1 Since you didn't list any of those state
2 agencies as one that you talked to, but this must
3 certainly be from permit applicants. My limited
4 experience in a development project that's not
5 related to petroleum says that you can't get the
6 California Energy Commission entries to bear
7 witness with that kind of material.

8 My questions to you is, what's unique
9 about construction of petroleum product storage
10 that makes the state agency array here seem so
11 benign?

12 MR. LANZA: I think what you are looking
13 at here is a comparison between state agencies and
14 local agencies. That the permitting of petroleum
15 product storage facilities is not unique with
16 respect to the state agencies, but the information
17 that we received with respect to the local
18 permitting process indicated that might be what is
19 unique, not with respect to how the state agencies
20 function with respect to permitting a petroleum
21 product storage facility versus any other kind of
22 air emission source.

23 I think what you are seeing here is that
24 it's the local process that we are finding more
25 of our findings on rather than the state process.

1 We did talk to several jurisdictions,
2 cities, with respect to how they manage their
3 permit process, including the City of Martinez, I
4 know that was one that was just mentioned. We
5 also talked to permit applicants concerning how
6 the process worked. Our findings with respect to
7 what the applicants were describing versus what
8 the agencies were describing were not
9 fundamentally different. We are seeing a
10 situation where there is a lot of uncertainty with
11 respect to the local process, and not necessarily
12 as much uncertainty with respect to the district
13 or state process.

14 MS. CACHO: Hi, Mariella Cacho from ICF,
15 I just want to emphasize a little more. The
16 difference between the state and local agencies is
17 the community will live with a tank next door, the
18 community will have all the ordinances and
19 revelations stating you need to paint it this
20 color, you need to put landscaping all around.
21 They are more involved because the tank will be
22 built in their community. Normally, the local
23 agencies are the ones who think to stay in the
24 period longer.

25 Everybody tells us that all the state

1 permits were straightforward, two to four months,
2 there was not a big delay. Thank you.

3 PRESIDING MEMBER BOYD: We accept, as
4 our last -- as Tony indicated and with respect to
5 power plants, and since Commissioner Geesman lived
6 through them, the color of the plant, the
7 landscaping of the plant, etc. etc. etc. are all
8 very highly emotional local issues which just
9 causes us to have hearings in local agencies at
10 nauseam to address those issues.

11 The question is on the timeline, which
12 process ends up taking less time from start to
13 finish. It's an interesting comparison.

14 MR. GIESKES: Yeah, Robert and Mariella,
15 I fully agree, it's an excellent report, very
16 informative. I had one question. In all
17 stakeholder meetings, frequently people made
18 mention of lawsuits, either against the permitting
19 agency or against the applicant. Those lawsuits
20 are getting better organized. The (inaudible)
21 like Citizens for a Better Environment are very
22 well organized and those lawsuits, even if you
23 were to streamline the permitting process, would
24 still, like you said, the appeal process has no
25 deadline. Was any of that brought forward in your

1 stakeholder meetings, and do you see any way to
2 maybe get over that hurdle as well?

3 MR. LANZA: Yes, we did get quite a few
4 comments from applicants and agencies concerning
5 what we refer to as the appeals process, meaning
6 that after the permit process ends, and the permit
7 process is what is controlled by the CEQA
8 timelines and what is controlled by the Permit
9 Streamlining Act timelines. Once you leave that
10 process and go into the appeals process, there are
11 no timelines. That's a fundamental part of your
12 problem with respect to the level of uncertainty
13 in getting all your permits and approvals.

14 We couldn't really address the judicial
15 process head on, it really wasn't as much a part
16 of our scope, our scope was more in terms of the
17 regulatory process, but certainly the appeals
18 process, the judicial process is pretty key to
19 solving the uncertainty with respect to
20 permitting.

21 Now, how you do that, I mean, the
22 fundamental way you do that is you have boundaries
23 as to what people can raise as issues, and what
24 people can't raise as issues. With respect to the
25 NEPA process, in general terms, there are

1 boundaries as to what stakeholders can bring in as
2 issues and what stakeholders can't. That would be
3 one thing that I think would at least, in some
4 cases, you know, shorten the amount of appeals, or
5 shorten the number of appeals.

6 We did find a situation where
7 stakeholders were coming back into the process
8 with multiple appeals on different issues versus
9 coming in to the process with one appeal that
10 encompassed all the issues they might be concerned
11 with.

12 The applicants thought that was an
13 intentional delaying tactic, and that is something
14 we think there is a possibility of being
15 addressed.

16 MR. GIESKES: Okay, thanks.

17 COMMISSIONER GEESMAN: I would add there
18 that in the power plant area, permitting decisions
19 by the Energy Commission are subject to direct
20 appeal to the State Supreme Court, and that has
21 served to focus both the nature of the appeal and
22 the time allowed for such an appeal.

23 PRESIDING MEMBER BOYD: Dr. Williams.

24 DR. WILLIAMS: Jeffrey Williams. If you
25 had to pick one number as the total cost of all

1 the delays, the consulting fees, and all that, and
2 the final project is it 5 percent, 25 percent?

3 MR. LANZA: One of things that --

4 DR. WILLIAMS: Just pick a number.

5 MR. LANZA: -- one of things that we
6 weren't able to do is get a lot of cost
7 information because the applicants wouldn't give
8 us hard numbers because a lot of that information
9 is proprietary.

10 You are talking about a situation where
11 you may be talking about 10 percent of your total
12 project cost by the time you are said and done
13 with everything. An EIR for a large facility
14 could cost a quarter of a million dollars. In
15 some cases, the applicant's paying for two of
16 them, so you've got a significant chunk of
17 expenditure right there.

18 The thing that we weren't able to get
19 information on from the applicants is what is the
20 cost of starting the project six months later than
21 you would have. I mean, the whole idea of getting
22 your project on line before the seasonal change,
23 we couldn't really qualify that with respect to
24 the applicants that we talked to, but certainly if
25 you wanted to point to one thing in terms of

1 what's the cost, what's the internal cost to the
2 applicant of getting on line six months late, that
3 is not a small number.

4 MS. JONES: You mentioned again the
5 duplicate EIR's, and do those come about because
6 you want to have dueling experts to address issues
7 or is there some other reason?

8 MR. LANZA: I think that the real
9 rationale for it is an attempt by the applicant to
10 speed the process up, not attempt by the applicant
11 to influence the answer. I think they are just
12 trying to get out of the gate with something that
13 is completed in a more timely manner than the
14 parallel process that is going on. Mariella,
15 would you like to -- thank you.

16 MR. MATTHEWS: I'm Scott Matthews, I'm
17 with the Energy Commission. I've actually worked
18 in both our power plant siting process and with
19 our building standards, so I have run into permit
20 issues over my thirty whatever it is years.

21 Can you prioritize your recommendations
22 in any way? There are a lot of different issues,
23 some of which are relatively easy to solve, for
24 example, training, which we do a lot of for
25 building standards.

1 Other things are more difficult, like
2 substantive structural changes in the permit
3 process. You had some ideas for the applicants,
4 which having been through the power plant siting
5 process, different applicants are more successful
6 than others because of the way they react with the
7 community.

8 MR. LANZA: Part of what we are looking
9 at here is easy to do, hard to do, and the hard to
10 do is the whole idea of establishing consistency
11 in the local permitting process. You are in a
12 situation with your conditional use permits, where
13 your local agency is your lead agency in a lot of
14 cases. As you go around the state, and try to
15 establish consistency between the 400 some odd
16 local governments in California with respect to
17 applications of codes and ordinances to a
18 petroleum product storage facility, that's hard to
19 do, but it is pretty critically important with
20 respect to establishing some standards as to, you
21 now, do you have to "paint the tanks blue or
22 green".

23 The other thing that I would point to is
24 the staffing and the training of local government
25 entities to review and process these applications

1 and manage the process. Assuming you are going
2 to, you know, pursue having local agencies as lead
3 agencies with respect to reviewing these
4 engineering documents, you need to establish some
5 framework for those applications to be reviewed.

6 We are seeing the applicants telling us
7 that we are providing these pretty large technical
8 documents to local planning commissions that are
9 used to dealing with land use and zoning issues,
10 and they can't process them. From that
11 standpoint, that's a pretty important thing to do.

12 Now one of the things that we talked
13 about in the report that didn't get into my
14 presentation is the funding issue. One of the
15 things we found was that certain agencies within
16 the state are on an hourly funding basis, where
17 they actually bill the applicant with the number
18 of hours they spend reviewing the application
19 versus other agencies which are a flat fee where
20 they are charging agencies \$500 -- charging
21 applicants \$500 or what have you to review an
22 application where that is far from covering the
23 entire cost of, you know, what the agencies are
24 actually expending in processing the application.

25 Considering the economic climate, one of

1 the things that we put into the report was an
2 examination of whether this hourly funding process
3 that certain agencies in the state are using,
4 should be expanded, so that agencies would be
5 bringing in more money with respect to staffing
6 and training so they can process the applications
7 more efficiently.

8 The third thing that we discussed which
9 I think is critical, but hard to address, and even
10 outside the scope of what we are doing is the
11 judicial process. We are focusing on the
12 regulatory side of the permitting process versus
13 what happens when you get into court, what lawsuit
14 with stakeholders, etc. That's pretty critical.
15 The idea of having a direct line as in the power
16 plant program to a higher court certainly avoids
17 having to go through multiple courts to get to
18 that point, and that is something that ought to be
19 considered as well.

20 PRESIDING MEMBER BOYD: I think today we
21 were trying desperately to deal with only that
22 piece of the iceberg that you can see above the
23 water line, the issue as it relates to petroleum
24 storage, but this is the kind of issue you can't
25 deal with unless you pull the whole bloody thing

1 out of the water and look at it. Poor John and I
2 have taken on, and the Commission, is taking on a
3 huge task here, but I thank everybody.

4 I would reiterate what Commissioner
5 Geesman said earlier, and I would just throw out
6 to those of you here who are industry associations
7 to think of what your role might be in all of us
8 addressing this issue and what the role probably
9 some sister organizations that aren't here today
10 would be in approaching and addressing this issue.

11 This is a big issue, it would take a
12 very united front. It is, as I said earlier,
13 something a public private consortium of people
14 would have to take on if we were to really make
15 significant changes in the process in this state,
16 which many people seem to feel are needed.

17 With regard to our narrower issue of
18 dealing with price volatility and petroleum
19 product prices and what have you, we'll continue
20 to work with all of you here in this room and
21 anyone listening, but you really lit two fuses,
22 one on kind of a narrow issue that we want to deal
23 with, and one the great big issue that affects
24 perhaps the economy of the State of California,
25 that a much broader contingent of people are going

1 to need to address.

2 I guess by virtue of this process, we
3 get to throw it back on the table, but it will
4 take a big group of you. I can rattle, but I
5 won't here, rattle off the associations in this
6 state who have dealt with this issue in the past.
7 It can be dealt with as changes in process and
8 procedure, not with -- my one caution just out and
9 out attack on one piece of legislation versus
10 another.

11 I am remembering CARB Phase II gasoline,
12 the same kinds of issues that Mr. Sparano brought
13 up and many peoples attempt that it's to CEQA
14 because it's too big a problem. If we work on the
15 processes and procedures and try to improve them,
16 which we were able to do in a very narrow focused
17 surgical sense for that one issue, I think the
18 process gets handled quickly, but it would take a
19 huge effort to train so many people across the
20 spectrum. It would take an awful lot of people to
21 help do it, but it keeps coming up, and for those
22 present and who follow me in this task, it's a big
23 one that needs to be taken on and solved.

24 With that, any other comments,
25 questions. We will take a one hour break for

1 lunch and see you back here, according to the
2 clock on the back wall, at 1:15.

3 (Whereupon, at 12:15 p.m., the workshop
4 was adjourned, to reconvene at 1:15
5 p.m., this same day.)

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23 AFTERNOON SESSION 1:25 p.m.

24 PRESIDING MEMBER BOYD: We are ready, we
25 can reconvene after lunch. I just want to say one

1 more time to anybody out there listening on the
2 webcast, that you may e-mail questions to us here,
3 and we will see that those questions get asked and
4 answered. The e-mail address is lstamets, l-s-t-
5 a-m-e-t-s@energy.state.ca.us.

6 Our next topic of discussion is going to
7 be the California Marine Petroleum Infrastructure,
8 and David Hackett and Thomas Gieskes of Stillwater
9 are up for this one.

10 MR. HACKETT: Good afternoon
11 Commissioners and staff, ladies and gentleman.
12 I'm Dave Hackett, I'm with Stillwater Associates,
13 and we're here in this hour to talk about marine
14 infrastructure here in California.

15 The agenda for this talk today will
16 cover some background. We're going to look at the
17 two refining centers here in California, talk
18 about future infrastructure demand, and what we
19 see as current trends, and then talk about
20 conclusions and recommendations.

21 As background, the Strategic Fuel
22 Reserves Study, which Stillwater Associates did in
23 2002, identified a number of problems related to
24 marine infrastructure. Those include a lack of
25 well connected tankage on the water, a lack of

1 access to storage by independent importers, and
2 the uncertainty about the ability of market
3 participants to unload cargos.

4 I think probably one of the most
5 interesting aspects of the Strategic Fuel Reserve
6 Study, certainly from my perspective, was the
7 realization that California has switched from an
8 export market for hydro carbons to an import
9 market.

10 This happened in '99 as we talked about,
11 '99 was a bad year for refiners, imports stepped
12 up in large measure in place of the lost
13 production, and then they have continued ever
14 since. While to some degree or the other,
15 facilities that will work for exports will work
16 for imports, that's not necessarily always true,
17 certainly given the changing fuel specifications
18 here in California.

19 How do we find out these problems. We
20 did a series of stakeholder meetings, I think we
21 did 65 or so, and then we got a lot of push back
22 from stakeholders that you can't get a tank, you
23 certainly can't get a tank in LA, and so the
24 Energy Commission asked us to come back and take a
25 look at that and put some quantification around it.

1 As far as this study is concerned, our
2 methodology was, again, we had meetings with
3 stakeholders and those include terminal operators
4 and pipeline operators, port authorities Los
5 Angeles, Long Beach, and with some of the
6 refiners.

7 In addition to talking to the
8 stakeholders, we actually did some quantitative
9 analysis using the State Land Commission's data
10 base, which contains all the information about
11 tank movements in the ports here in California as
12 well as looking at the Army Corp of Engineers
13 data.

14 We identified a number of restraints
15 around hard restraints, which is essentially
16 physical things, that is to say the length of the
17 dock or the draft restrictions, pipeline capacity
18 and the like, as well as soft restraints which are
19 generally things that can be improved through
20 minor expenditures and better operating
21 procedures.

22 The report that you have that the
23 Commission put out today, is essentially an
24 executive summary and is not the main report. We
25 haven't published the main report for a couple of

1 reasons, one is confidentiality issues,
2 information that is specific to companies, but I
3 think from our perspective, and more importantly,
4 there are security issues. We chose not to make
5 this public because of the infrastructure issue,
6 the implications of it all. The Energy Commission
7 has got the report, though.

8 As far as infrastructure is concerned,
9 there are a number of larger refineries and some
10 small ones, bulk storage terminals, distribution
11 terminals, certainly there are a large number of
12 end user storage facilities. There are two major
13 pipelines owned by the same company, one of them
14 is the North System out of the Bay and one in the
15 South System out of Los Angeles, and there are
16 extensive pipeline networks that interconnect the
17 refineries, and this is especially true in Los
18 Angeles. Of course, there are crude oil
19 production and pipeline systems to go with all
20 that.

21 As far as the marine infrastructure is
22 concerned, just to sort of separate them, the
23 major refineries are certainly included in this,
24 not included are the refineries, for example, in
25 Bakersfield. 22 marine bulk storage facilities,

1 and then 5 inland terminals that connect to the
2 water, and then some smaller facilities as well.

3 The focus of this whole study that we
4 are on the main centers in the Bay and in LA.

5 MR. GIESKES: Commissioners, ladies and
6 gentlemen, I'm Thomas Gieskes with Stillwater
7 Associates. I shall walk you through some of the
8 details in this setting beginning with the Bay
9 area.

10 The Bay Area is a large expanse of
11 water, has a very extensive shoreline, and in
12 fact, all the petroleum infrastructure in the Bay
13 Area is part of the marine infrastructure. All
14 terminals and all refineries are located on the
15 waterfront or very close to it and have their own
16 docks and interconnected.

17 What sets the Bay Area apart is it's
18 generally very shallow. There are some deeper
19 parts, but right at the entrance of the bay, there
20 are a number of banks -- let me find it for a
21 moment -- through which a channel is cut that is
22 about 55 feet draft. That means that inland, this
23 is the Richmond Refinery, has a fairly deep dock,
24 but further inland into the bay, this is the San
25 Pablo Bay, there is a series of shallows here,

1 which are called the Pinole Shoals, and those
2 Pinole Shoals are one of the major bottlenecks.

3 One of the restraints that we found in
4 talking to the people in the bay, is that these
5 shoals which require regular maintenance,
6 dredging, have not been dredged for a while,
7 except for some emergency dredging.

8 Very recently some funds were approved
9 by the Feds to allow to use U.S. Army Corp of
10 Engineers to continue the dredging program. In
11 actual fact, it's more difficult than just setting
12 the funds aside because you have to dispose of the
13 dredge material, you can only do that in certain
14 areas in the bay and certain very restricted
15 seasons in order not to damage the marine life and
16 otherwise you have to take this dredge material
17 and bring it all the way out to the ocean, and
18 that requires different type of dredging materials
19 and is much more expensive.

20 The long and the short of the story, is
21 that all the marine facilities with the exception
22 of those in Richmond, are affected by draft
23 restrictions. Draft restrictions mean small
24 vessels which translates into more portals, more
25 dredging congestion, and higher cost.

1 With that, let me move on to the
2 waterborne volumes. All in all, a very
3 significant part of the volumes coming into the
4 Bay area consists of crude oil, it is well over
5 half of all the marine transportation. Typically,
6 that comes in vessels that are of a size that can
7 just barely make it over the Pinole Shoals, can
8 just barely clear the overhead clearance under the
9 bridges, which is also fairly restrictive. Some
10 of these tankers actually have to take their mast
11 down when they come in. There is a fairly
12 significant movement of clean products, both in
13 and out going.

14 Overall, the San Francisco Bay Area is
15 alone is a net exporter, it exports clean products
16 to Portland and San Francisco by barge, so clean
17 products go both in and out, and then there is a
18 significant volume of black oil.

19 Some of those are intermediate products,
20 things like life cycle oil and cutter stock, a lot
21 of those movements are also in the refinery within
22 the Bay. It is a fairly significant volume.

23 That leads us to what does this
24 particular volume that handles crude oil, clean
25 and black products do for jet fuel occupancy.

1 What you see here, each block represents a certain
2 volume in millions of barrels. For instance this
3 about 120 million barrels. We looked at using
4 data from the State Land Commission on when
5 vessels come in and when they go out at the hour
6 spent and total numbers of vessels coming in at
7 the off loading grades and calculated a sort of
8 lowest observed berth occupancy in any given month
9 and the highest. This was for the year 2001.

10 This means that for this particular
11 refinery, a really busy month, so the jet fuels
12 being occupied about 55 percent, and a slow month
13 was 35.

14 The five major refineries in the Bay, so
15 what you see here, is on average all these
16 refineries operate and arrange between 40 and 50
17 percent with one exception going up to 60.

18 What is the best to do. In general
19 terms, as long as you are in the range of 50 to 60
20 percent, you will see no major scheduling
21 conflicts, no major demurrage. Demurrage is the
22 money that you have to pay if you keep a ship
23 waiting while you hadn't agreed, late end period,
24 and the vessel shows up at the agreed date, but
25 the dock is occupied.

1 The cost for keeping a vessel waiting
2 can easily run about \$30,000 a day, so once you
3 have about the 60 percent, that is where you can
4 frequently expect scheduling conflicts in the
5 range of 80 to 100 percent, you see some serious
6 queuing.

7 What this tells us is that overall, this
8 is the same for the terminals in the Bay, what
9 this tells us is that overall, 85 percent of all
10 the volumes in the Bay is brought in over docks
11 that see good usage but still well within the
12 operable range. Like I said, there is one dock
13 that is sort of at the upper end of that range.

14 Let's take a look at the clean products
15 gathering system. There is a network in the Bay
16 Area that is looped to a certain extent in which
17 interconnects the refineries and the major
18 terminals with the send off point for the pipeline
19 of Kinder Morgan at Concord.

20 Each of these terminals and refineries
21 when they want to send product into the market
22 into the truck rack terminals and up to Reno or
23 Sacramento, has to pass through Concord. In
24 talking to the stakeholders, we heard a very
25 consistent story in that this system is very

1 congested. In general, the transfer rates are
2 very low, they are typically less than 20 percent
3 of the speed of transfers in the LA Basin, so of
4 those are as low as 1,500 bales per hour which is
5 really low.

6 There are frequent scheduling conflicts,
7 so it is difficult for people to meet the pipeline
8 schedule, the weekly pipeline schedule in Concord.

9 The bottlenecks that were described to
10 us are very structural, line diameters being too
11 small, yes, you could put a bigger pump in, but
12 then the suction system to the tank is too small,
13 so there are no easy upgrades here, no small
14 improvements that you could make. All the low
15 hanging fruit has been picked long ago.

16 What happens here is until you really
17 get sufficient economic justification to do a
18 complete overhaul, the system has to get by as is,
19 and if all else fails, you can put product on the
20 barge and ship it around.

21 This is one of the more fundamental
22 bottlenecks that we identified in the Bay Area.
23 There is a black oil system in the Bay as well,
24 largely an obsolete system, it was used at the
25 time to transfer black oils generated in the

1 refineries to the local power stations when these
2 power stations stopped burning black oil and
3 switched to natural gas, these systems became
4 obsolete.

5 There is substantial idle storage
6 associated with that. There is about 9 million or
7 8 to 9 million barrels of idle tankage all
8 maintained at rate payer's expense. It is in
9 great shape, I've seen it, and it is sitting there
10 idle. It's large tankage that could not be used
11 for clean product easily.

12 There is idle pipeline which could be
13 used for other purposes as well. In black oil,
14 and crude oil, there are no reported problems
15 there.

16 PRESIDING MEMBER BOYD: Gregg, you said
17 they couldn't be used for clean product?

18 MR. GIESKES: Not easily, these are
19 large half million barrel tanks, they are not
20 permitted for light products in the case of the
21 Pittsburgh terminal, a lot of the tanks are really
22 close to housing. Antioch is a slightly different
23 picture, what these tanks would be very good for
24 is if indeed the State of California, we need to
25 do something with crude oil, that would be a

1 different story, but for clean products, it's not
2 entirely impossible, but it would be a difficult
3 conversion.

4 Storage in the Bay Area. The total
5 tankage, and this is based on the Water Board
6 Permit Registry on above ground petroleum tanks is
7 about 41 million barrels of tankage at the
8 refinery, there's about 9 million at the
9 terminals, the major terminals.

10 Information received from the
11 stakeholders that on average, tankage in the
12 commercial terminals does about one, what is
13 called, a tank turn per month, the throughputs is
14 roughly equal to the volume of the tank ones per
15 month. That is a normal commercial rate, it's on
16 the lower side. You could do two terminal
17 operators would like to see two which means
18 additional throughput over and above the contract.

19 At the refineries, the operational tanks
20 work really hard, we did not have the same level
21 of detailed information in the Bay Area as we had
22 in Los Angeles unfortunately, so we were not able
23 to pin that down as exact as we would have liked,
24 but what we can say is from what we can estimate
25 looking at total tankage, the refinery operations,

1 etc. is that the tankage at the refineries work
2 really hard.

3 Not all refineries are equal, the
4 smaller ones seem to have six to seven days then
5 there are people that have on average ten to
6 twelve days of operating inventories at the
7 refinery.

8 Let's take a look at Los Angeles Basin.
9 The LA Basin is fundamentally different from the
10 Bay Area. First of all, the shoreline is really
11 at the premium here, it is a very compact area,
12 although, when you drive through it, it is much
13 larger than you think than looking at a map.

14 It compares to the Bay Area, shoreline
15 is at the premium, land is extremely difficult and
16 extremely (inaudible), but 40 percent of all U.S.
17 imports and exports pass through these two ports.
18 This is an area of great importance, and the
19 marine infrastructure here has to compete with
20 cars and containers which are much higher added
21 value products. It's a tough competition.

22 What is concentrated on the water here
23 are mainly terminals. These terminals have good
24 docks, some of them a little less so and small
25 storage. The bulk of the larger storage is

1 located inland, a distance of about 8 to 10 miles,
2 and this poses some particular problems that we
3 will talk to you later about.

4 Any number of refineries, the one
5 exception really that it is still part of the LA
6 Basin marine infrastructure, is the Chevron El
7 Segundo Refinery which does not or hardly uses the
8 facilities of the port. There is a little bit of
9 black oil that gets sent down and handled through
10 the LA Basin proper, but this refinery has two
11 multi-point moorings in the Santa Monica Bay that
12 are used to off load crude oil and products.

13 With these refineries being inland or
14 some distance inland, how do they move their
15 products and crude oil? There's a very complex
16 network of pipeline that links most of these
17 refineries to at least two or three docks, so they
18 have multiple options, some over at their own
19 facilities, some of those through third party
20 facilities, but it's not as simple a picture here
21 to say which dock is congested and how will it
22 impact certain refineries.

23 Volumes handled in the bay, once again,
24 the majority of petroleum products coming in is
25 crude oil, well over half, very significant

1 imports of clean products in the LA Basin. This
2 is where most of the California shortfall occurs
3 and you can clearly see that in the products.
4 There is very little going out except for black
5 oil, so there is a lively bunker business in the
6 LA Harbor and there is some residual fuel and
7 other intermediates that are shipped out, but for
8 the most part, business in imports is harbor and
9 it's importing crude oil and products.

10 MR. SPARANO: Thomas?

11 MR. GIESKES: Yes.

12 MR. SPARANO: On these products, when
13 you use the term import, do you mean literally
14 from outside the shores of California or would
15 that include San Francisco as well.

16 MR. GIESKES: Thanks for bringing it up.
17 When I talk about imports here, it is everything,
18 so this is barges and these are total volumes
19 because for the usage of marine infrastructure, it
20 doesn't really make any difference whether it's a
21 domestic vessel coming in from the Bay or from the
22 U.S. Gulf Coast.

23 Once again, the same picture here, but
24 since most of -- don't make the distinction here
25 between refineries and terminal docks because the

1 refineries use terminal docks for the most part.
2 Jet fuel occupancy, if we look at the volume
3 spread once again, each block represents a certain
4 volume in millions of barrels a year, and the
5 lowest and highest jet fuel occupancy in a given
6 month. You will see that on average, there is
7 a -- the vast bulk of the terminals is really well
8 used.

9 In actual fact, these figures may be
10 conservative, these were 2001, there were some
11 very recent incidents that we picked up in our
12 stakeholder meeting where people were not able to
13 bring in a cargo and were told that at a certain
14 terminal, their first opportunity to off load
15 would be in mid May. This was at the height of
16 the gasoline crisis, and this was much needed
17 cargo of gasoline.

18 Even though on the average basis and for
19 2001, there were only two terminals that sort of
20 tipped the range of the jet fuel occupancy where
21 you can expect some serious problems. I suspect
22 that on more recent data, and then certainly in
23 peak months, you will see more of this volume in
24 this range.

25 That picture is important to remember

1 when we will discuss in the next slides or so of
2 the future infrastructure requirements and import
3 volumes doubling, so keep that in mind that you
4 are at the upper end of the operable range here.

5 Total tankage, once again, from Permit
6 Registry, there is about 61 million barrels of
7 refinery storage, 28 million barrels of terminals,
8 and only 8 million of that are directly at the
9 water, so that is a major, major difference
10 between the LA Basin and the Bay.

11 In the Bay, everything sits on the
12 water, plenty of shoreline in LA, most of those
13 are 8 to 10 miles inland, and have to rely on
14 pipelines to get the product from the dock into
15 the tankage.

16 The throughput, once again, at
17 commercial terminals are well within the operable
18 range. At the refineries and at some of the key
19 tankage at some of the commercial terminals
20 receive high throughput sweep. We had more
21 detailed information available here, we've seen
22 some tanks that would turn, as they say, every
23 three days or every two days, so this tankage is
24 worked really really hard.

25 Average on site inventories of crude and

1 product storage are between four and twelve days.
2 The usage -- this is an interesting element, and
3 these figures, of course represent a moving
4 target, we are probably as close as we can get at
5 any point in time, but they are based on estimates
6 of discussions at stakeholder meetings.

7 We think that about 41 percent of the
8 storage is actually owned by the local refiners.
9 That an equal proportion is leased by the major
10 refiners in the commercial terminals and the long
11 time contracts. Then there is a much smaller
12 portion that is about 9 percent that is owned or
13 leased by independents, and 7 percent of the
14 available shell barrels are idle mainly old and
15 obsolete tankage and some of that is the subject
16 of current renovation projects to bring that
17 tankage back on line.

18 Last, but not least, there is an
19 initiative in the LA Basin by the South Coast
20 Quality Management District, which is an off shoot
21 of settlement that was reached whereby emissions
22 from major sources have to be reduced by a certain
23 quantities over certain periods of time. As part
24 of that, there was a Rule 1178, which was approved
25 in January of 2002, which will require major

1 tunnels that are linked to certain level of
2 emissions per year, and the refineries to put
3 domes on the tanks that contain volatile
4 materials, such as gasoline and blended
5 components.

6 These domes will reduce the emissions
7 that you get by the wind blowing over the tanks
8 and lifting materials at the seals. In order to
9 dome these tanks, the estimate is that is
10 somewhere between 10 and 20 percent of all this
11 tankage, this really hard working tankage in the
12 LA Basin will be out of service at any given point
13 in time in the next seven years when the refiners
14 and terminal operators have to comply with this
15 rule.

16 Remember that the over view of the Bay
17 Area where you had sort of one central gathering
18 system owned by Kinder Morgan largely by the
19 refiners and ST Services. In comparison, the LA
20 Basin is a plate of spaghetti. There is a great
21 amount of steel in the ground, and to put a
22 picture together that shows everything, you really
23 need a wall chart. On a small scale just to
24 illustrate the complexity of the system this would
25 be one company's proprietary pipeline system

1 running from docks and terminals and refineries
2 and distribution terminals in the L A Basin.

3 The same for another company, and if you
4 overlay all these various proprietary pipeline
5 systems on top of each other, you get to a very
6 very complex picture. Nevertheless, there are
7 some serious constraints. You will still find a
8 couple of terminals in the LA Basin that aren't
9 well connected, that have connections only to
10 their own dock and then maybe to the rest of the
11 system through a connection with a competing
12 terminal company, or a terminal that has only one
13 pipeline for in and out, and those terminals are
14 referred to as sort of like Hotel California, you
15 can check out any time you want, but you can never
16 leave. There are constraints.

17 The most serious constraint that we
18 found in the L A Basin, is really the capability
19 of the marine terminals, the terminals right at
20 the water to bridge half the small storage, that
21 is only 8 million barrels. To transfer cargos
22 inland to the major refineries and the major
23 tunnels, so it is no good having a tunnel with
24 three berths, if you have only one pipeline for
25 clean products going inland. You can receive the

1 vessel at the dock, but you can't start pumping
2 until the other vessel is empty. Bottlenecks of
3 this nature are very expensive to address.

4 Moving on to the future demand for
5 infrastructure, beginning with crude oil, which as
6 we've seen is the over 50 percent of all volumes
7 moved.

8 Consultants always love to see a graph
9 like this, this is such a clear -- this is the
10 decline of Alaska, and the decline of Alaska is
11 mainly felt in California. This is a decline of
12 about 8 percent for year. Then you have the
13 inland crude production, and although it has been
14 holding up fairly well, if you look at this trend
15 over the long run, in recent years, this decline
16 here is about 3 percent per year, and the
17 expectation is that because these fuels are very
18 very mature, that even with the best of tertiary
19 recovery techniques, and despite some recent
20 successes such as the Elk Hills programs now,
21 which after they have been privatized yield a lot
22 more product, but the writing is on the wall, and
23 the production in California will decline probably
24 at a rate of 3 percent or 4 percent a year.

25 What that means, is that the dependency

1 on foreign imports, which was very very small as
2 recent as 1990, is currently well over a quarter
3 of the total California crude oil consumption.
4 About half of the import segments are about 25
5 percent of waterborne crude comes in from the
6 Arabian gulf. To do so economically, you have to
7 ship that in very large crude carriers, VLCC's,
8 vessels that carry typically between one and a
9 half and two and a half million barrels, so these
10 are very big slugs of crude oil coming in at one
11 time and impacts the storage system entirely
12 different from what pipeline receives or imports
13 in smaller ships.

14 You have to think of this as a pipeline
15 which could be continued in and out of tankage
16 where the level hardly moves. If you get a
17 regular supply of small vessels, you see small
18 soft throughs, if you get a lot of VLCC's, you see
19 huge inventory swings.

20 Since the total inventory of
21 California's crude on average at the refineries is
22 something like 15 million barrels, a 2 million
23 barrel sludge is a big impact on your inventory.
24 It has some other consequences as well.

25 In terms of current operations, there is

1 about one VLCC, about 250,000 barrels a day, 25
2 percent of waterborne crude coming in on these
3 vessels.

4 In all of California, there's one berth
5 capable of handling such vessels currently, which
6 is BP's Berth 121 in Long Beach. There is a
7 project currently, we will come back to that. The
8 other VLCC's that come in are lightered, as it is
9 called. There is a Water Board transferred
10 anchor off shore, usually in the lees of sediment.
11 Product is transferred into a smaller vessel that
12 then off loads cargos in LA, and then goes up to
13 the Bay Area, drops off cargo there, and all in
14 all, this can take a week to off load one of these
15 big VLCC's.

16 That, of course, is a costly way of
17 doing it. It also increases the risk of a spill.
18 Anytime you transfer cargos off shore, any time
19 you have to move two ships in close proximity in
20 unsheltered waters, it does incur additional risk.

21 The long term infrastructure needs, and
22 long term here means, and I don't pretend to look
23 any further out than 2010, long term
24 infrastructure needs, we see this doubling to
25 about two VLCC's, about 500,000 barrels a day off

1 very large crude carriers coming in.

2 There is a project currently in the Port
3 of Long Beach to use Berth 123. There was a
4 tender last year in August, several companies bid
5 on that. There is one company who is currently in
6 its second round negotiations with the Port of
7 Long Beach to make this happen. The requirements
8 really to make this a successful product would be
9 to get tie ins into El Segundo and Mobile
10 Torrence. That is a difficult proposition given
11 the pipeline route you would have to take through
12 the heart of some very expensive real estate in
13 Los Angeles.

14 There is no certainty at this point yet
15 that there will be any additional storage
16 associated with this project. Certainly if this
17 were to be realized, it would go a long way into
18 providing the infrastructure needed for California
19 for the next ten years or so in terms of where its
20 crude receipts seem to be heading.

21 Looking at the future infrastructure
22 demand for clean products, the key product is
23 gasoline. This is a busy graph, but let me show
24 you. What this purple area is, is the local
25 refineries production, MTBE imports phasing out as

1 we speak, and there was always a certain volume of
2 imports of clean stocks and finished gasoline.

3 With the advent of ethanol, which comes
4 in largely by rail, and the make of volumes that
5 will be required in terms of meeting overall
6 demand, there are three growth lines here. One is
7 for the 1.6 percent is the base case, and the high
8 case is 2.1, and the low is 1.1, but you can see
9 that the gap between what the local refinery
10 production can do and what ethanol would add to
11 that is steeply growing.

12 Incidentally this refinery production,
13 we will discuss this when we talk about as so far
14 as in a later presentation, but we have assumed a
15 .6 percent in net capacity creep a year in this
16 particular scenario.

17 What all this does is that imports, the
18 total imports of blend stocks and this includes
19 MTBE and blending components and finished
20 gasoline, are expected to roughly double, at least
21 a 70 percent increase over the next six years.
22 This was off a base case growth of 1.6 percent.

23 Actual growth has been much higher, these
24 percentages still represent the energy outlook
25 scenario, the last official energy outlook

1 scenario presented by the CEC, but they seem to be
2 conservative compared with to what is actually
3 happening out there.

4 Another percent growth out here could
5 add another 10,000 barrels a day easily. All that
6 does is, and I'll turn it over here to Dave again
7 to sum it up.

8 MR. HACKETT: Let me talk about trends
9 quickly. We, in doing the stakeholder rounds, we
10 went looking for projects, who is building what,
11 what's happening out there in the storage market.

12 What we discovered was since we started
13 this strategic fuel reserve project, which was
14 eighteen or nineteen months ago, when nobody was
15 building any tanks, actually tanks were coming
16 down, the whole tank infrastructure was headed
17 south.

18 We have actually seen and observed some
19 turn around in that, where there are projects that
20 are getting done, some in LA and some in the Bay
21 Area. You heard Tony Hoff of ST Services talking
22 about the three tanks that he is building in
23 Martinez.

24 What we see here is the projects that
25 have been committed are primarily entirely

1 projects that have gotten some kind of permitting
2 already done. As Tony said, he had an old EIR
3 that went with the construction of his tanks. In
4 Los Angeles, what we have seen is a refiner who
5 owns a terminal and has converted or restored
6 about 600,000 barrels of formerly idle tankage
7 into working services different than when we
8 talked to them in the fall of 2001. They hadn't
9 made that commitment yet.

10 Let's see, what else. We have see an
11 independent terminal operator that has been able
12 to do a deal -- let's see, I'm going to change
13 screens here. Probably the big project here is
14 the 2 million one, that is the crude oil, and that
15 is at Berth 123. There is a half million barrels
16 there to be determined, a small refiner does
17 various upgrade of old tankage, that is a
18 potential project, don't know if that is going to
19 go anywhere or not.

20 What we can see is what appears to be
21 1.4 million barrels of firm commitment to bring
22 old tankage back on line or to construct some new
23 capacity.

24 As I was talking about, we were
25 responding to opportunities, and this is

1 different. We have seen a change in direction
2 here. One refiner's terminal has upgraded old
3 tankage, we see that several trading companies
4 have signed term agreements with terminal
5 companies, this was different than what we were
6 told eighteen months ago.

7 We also observe the master lender
8 partnerships, these are the entities that own some
9 of these terminal companies. They are willing to
10 build capacity on contracts that are shorter
11 termed than they had initially reported to us.

12 Of course there is a caveat with all
13 this. The current projects, the 1.4 million that
14 we see, is all under -- is in the same category as
15 Tony's stuff, they are under current permits.
16 Where the new permitting is expected to take two
17 to three years, and two to three years, that is
18 the time that stakeholders reported to us that
19 they thought it would take to get these tanks
20 built.

21 The Port of Los Angeles continues to
22 look at bulk liquid storage capacity that is
23 currently built in order to consider transitioning
24 that to containers or to car imports.

25 We have noted that commercial term

1 operators are studying deep bottlenecking projects
2 at their local docks, sort of responding to this
3 concern of, you know, I've got a tanker, but I
4 can't unload it for six weeks.

5 All right, now. Conclusions. San
6 Francisco Bay, we see that the overall handling
7 capacity for bulk liquids is adequate, but there
8 is a growing concern about the ability to bring
9 ships in, especially in the East Bay over Pinole
10 Shoals, where the water now is down to 31 1/2 feet
11 as opposed to 38 or 39, which is the -- Tony, help
12 me with that, what is that supposed to be? Pinole
13 Shoals is supposed to be at what depth?

14 MR. HOFF: 35.

15 MR. HACKETT: At 35? Okay. Of course,
16 in the Bay there is wide spread constraints around
17 the gathering system that is getting the barrels
18 from the terminals and the refineries into Concord
19 is a concern with what looks like a tough nut to
20 crack.

21 In LA Basin, it is our opinion that the
22 handling capacity continues to be marginally.
23 There is general tightness in storage -- there is
24 limited access to tankage by independent
25 importers.

1 Now, what we did do is we were able to
2 determine that independent importers, that is to
3 say, companies, not the local refiners, have
4 succeeded in getting storage capacity in Los
5 Angeles, although they report to us that none of
6 them have enough tanks in to bring in their cargo.

7 We see that the lack of tankage on the
8 water and/or constraints of moving the product
9 from the docks inland is a problem. Some of these
10 berths will be more and more congested, and we
11 remain concerned about the issue of tankage on the
12 water.

13 Turning to crude oil, imports are going
14 to continue to increase, likely that increase is
15 going to be on crude carriers coming from the
16 Middle East. The balance of the crude comes from
17 the Pacific Rim, a lot from South America, Peru,
18 Ecuador, some from Venezuela, and Mexico,
19 Indonesia, and some from Australia, but the next
20 increment, frankly for the whole world, is going
21 to be coming out of the Persian Gulf.

22 There is, you know, additional risk with
23 lightering and we think with moorings as opposed
24 to bringing ships to docks. The crude oil
25 inventories have been low, have always been low,

1 although I will note we have no stories of anybody
2 running out of crude in all this.

3 There are some uncertainties about
4 whether this new deep water dock in the Port of
5 Long Beach is going to go or not. The permitting
6 environment, you guys heard the permitting story
7 and thanks very much for that because that
8 really -- I have heard people whine about the
9 permit process for years, but I never really
10 understood it, and now you have given us sort of a
11 guide for understanding how that works.

12 There is this impact of this Air Quality
13 Management Rule 1178, which is going to take
14 storage out of the market as the operators put
15 domes on all these tanks.

16 Positives, though, we do see capacity
17 additions under existing permits and frankly the
18 people running these places work hard to figure
19 out how to get product ashore and the like, and
20 they will continue to run the system as hard as
21 they can.

22 Did I get to the end? I got to the end.
23 No, recommendations. This thing is more sensitive
24 than the keyboard.

25 All right, what should the state do

1 about this? Well, you come back to the permitting
2 issues, I don't have a solution for that, I'll
3 just, you know, we picked it up in the SFR Study
4 and we continue to say you all need to figure this
5 out. If we can help we will, but we are certainly
6 not the experts there.

7 The second point, coordinate state and
8 local interests in the Ports of LA, Long Beach,
9 and the Bay, especially with L A Long Beach.
10 They've got their own drives which may not
11 necessarily be consistent with the overall good.
12 Certainly one thing that we have been concerned
13 about is that the Ports of LA Long Beach are
14 regional suppliers of petroleum products, not just
15 suppliers to California. Regional means Phoenix
16 and Tucson, Arizona and Las Vegas. When Phoenix
17 has a problem with gasoline supply and you will
18 see this in a map a little bit later because their
19 normal supplier is out of Texas and Mexico are
20 having problems, they could look to LA for that
21 supply. Along that, frankly these days, it's
22 probably going to come in on a tanker. This is a
23 regional issue as well.

24 We see helping to resolve the dredging
25 issues, that is important. Dredging issues are

1 big in the Bay, the Pinole Shoals thing is a big
2 issue, and not just for the oil industry but for,
3 I think, the general cargo people, container ships
4 can't get to Stockton and the like.

5 In addition, there are dredging issues
6 in, I guess, the Port of Long Beach, and that
7 comes back to where some of these berths do need
8 dredging, and what to do with the spoils is always
9 a tough nut, so that one is out there and we
10 recognize it. Continuing to support
11 infrastructure project.

12 The next big bullet, street fuel
13 reserves said that we thought that one of the
14 reasons that the industry was not building
15 capacity was that these projects seem to be risky.
16 They are risky because they take a long time.
17 They take a long time because of this permitting
18 time takes two or three years, and then a year or
19 so to construct. You are talking about a three or
20 four year project to build a tank. What we had
21 been told was that many of the people who might be
22 interested in those tanks, didn't have the
23 patience or weren't willing to take on the risk of
24 committing to a project that long in advance.
25 That is why we thought some sort of support for

1 these infrastructure projects might be useful.

2 Finally, and this clearly is right in
3 the center of the Energy Commission's bailiwick,
4 and that is collect and analyze the data
5 pertaining to waterborne movements. What we
6 discovered was this States Land Commission's data
7 base where they can see what all the movements
8 are, so we believe the analysis of that data base
9 would go along way to creating transparency about
10 what's really happening in the market. It might
11 very well help to explain how hard, for example,
12 the oil industry is working to bring cargos in and
13 their constraints are. That is the conclusion.

14 PRESIDING MEMBER BOYD: Thank you.
15 Questions or comments from folks in the audience
16 and Melissa?

17 MS. JONES: I have a question about the
18 reduction in the storage capacity associated with
19 the SCAQMD Rule. You said 15 percent reduction.
20 Is that 15 percent being coordinated in some fashion?

21 MR. HACKETT: The companies that have to
22 do this are primarily the refiners and Kinder
23 Morgan, that is because they're the ones that are
24 the large admitters, and I'm not sure if that is
25 the right term. At any rate, they've got the big

1 tanks and the floating roofs, and my expectation
2 is that what each company is going to be doing is
3 looking at their inventory of tanks and trying to
4 figure out how they are going to get this
5 maintenance done in what is now a six year period.
6 I think we started out with seven last year, and
7 it's now six.

8 Each one of those companies,
9 individually, is going to have sort through that.
10 I defer to WSPA about whether the industry is
11 going to coordinates those, that doesn't seem
12 likely.

13 MS. JONES: In terms of your 15 percent
14 estimate, how did you come up with that?

15 MR. HACKETT: 100 percent of the tanks
16 have to be done in seven years.

17 MS. JONES: You just evenly spread it
18 over time?

19 MR. GIESKES: Actually, we did, on
20 behalf on WSPA --

21 MR. HACKETT: Come on up here.

22 MR. GIESKES: -- a fairly detailed
23 evaluation at the time where we compared
24 schedules. The original South Coast program
25 called for this whole thing to be done in four

1 years, and we could see that four years was
2 clearly not feasible. The 10 to 15, a lot depends
3 on how these tanks are actually going to be domed,
4 whether they can do it with products in the tank
5 or whether they have to empty the tanks first.
6 There are different techniques for doing this.

7 I think it will be coordinated almost
8 naturally because there is only limited number of
9 contractors that can do this work, so they can't
10 be doing too many tanks at the same time because
11 there is just not the qualified work force, so it
12 will be a natural coordination from the point of
13 view from the contractors.

14 MS. JONES: Thank you.

15 PRESIDING MEMBER BOYD: Brian.

16 MR. COVI: Yes. This is a closely
17 related question. Brian Covi. What is the
18 typical down time for a typical tank in terms of
19 turn around to get this maintenance work done?

20 MR. GIESKES: The schedules that we saw
21 at the time from the refiners were all over the
22 place, and if they can combine it with the regular
23 schedules, API 64, to programs, or if they have to
24 do maintenance work at the same time.

25 Some refiners estimated three months per

1 tank, others were much faster, but I doubt you
2 could do it in less than four weeks. There were
3 some really long estimates, but that might have
4 been tanks that knew that once they opened it up,
5 there would be a problem and they might have to do
6 some other repairs at the same time.

7 COMMISSIONER GEESMAN: I wonder if you
8 could elaborate a little bit more on the reference
9 to loan guarantees there. I'm having a difficult
10 time understanding what problem that is designed
11 to fix.

12 MR. GIESKES: This went back to the
13 original SFR recommendation where --

14 COMMISSIONER GEESMAN: I'm sorry, that
15 predates me, so --

16 MR. GIESKES: Oh, one of the commercial
17 barriers that we saw, why doesn't more tankage get
18 built, is that most of the tank farms are now
19 owned by Master Limited Partnerships. Master
20 Limited Partnerships have certain preferential,
21 enjoy preferential tax treatment, but they can
22 only do so from what is called qualified income.

23 Qualified income requires long term
24 contracts with a major credit worthy company and
25 it has to be in the twelve year or more or some

1 other qualified commodity.

2 These companies cannot build tankage on
3 spec as it is called, speculation. Ten years ago
4 you had companies that were normal c corps, active
5 in commercial storage, the markets got tight, it
6 is like ship building and tank building was in
7 their blood. They would say we would go out and
8 build ten tanks, you no longer see that, no
9 tankage gets built on speculations. MLP's are
10 simply not capable to do that, their shareholders
11 or their holders of the unit would be up in arms
12 if it did so.

13 On the other hand, the commercial tank,
14 the spot tankage market dried up, most of the
15 tankage got tighter and tighter, most of the
16 refiners wanted to secure their operational tank
17 requirements, and sign long term deals with the
18 commercial operators, so the squeeze, who got
19 squeezed out in all this, was the independent
20 importer, the trader who is looking for a short
21 spot tank rental. I need to park some barrels
22 here for three months, or four months. Ten years
23 ago or five years ago, you could have found
24 easily, you paid a little premium, but you could
25 easily have found tankage.

1 In order to break through that conundrum
2 of MLP's require long term contracts, the market
3 requirement is really for short term tankage. How
4 can you get through that, even though you can see
5 that overall the requirement is there.

6 It might be by providing a loan
7 guarantee. Now the terminal builder, the tank
8 builder, can build tanks justified to its
9 shareholders because it is underwritten and now he
10 can rent out this tankage in a short term market,
11 and that was the underlying idea.

12 State monies for infrastructure are
13 quite common, I mean roads and all these other
14 things, and what we figured since the market
15 requirement is so real, what you do with this type
16 of investment support, it's not costing the State
17 a great deal, but you remove a risk element.

18 Rather than -- commercially, the
19 industry will take care of itself, but it only
20 does so after the problem has become sufficiently
21 big for there to be any kind of justification.

22 If you want the State point of view and
23 the energy security point of view, is you want to
24 sort of prevent the problem rather than see it
25 yield after time. These types of investment

1 guarantees could be an instrument. That was the
2 reasoning.

3 PRESIDING MEMBER BOYD: Questions,
4 comments from folks out there.

5 MR. LANZA: Yes, I'm Robert Lanza from
6 ICF Consulting. I had a follow up question to the
7 implementation of the tank domes for the South
8 Coast district with respect to the current six
9 year time frame. Did you find any actual timeline
10 for people who have estimated how much time the
11 permitting part of that process would take versus
12 the engineering process, and do you have any
13 indication that six years is a sufficient amount
14 of time to conduct all the necessary conversions?

15 MR. HACKETT: We were brought into the
16 project in November or December of 2001, fifteen
17 or sixteen months ago, and we did our analysis. I
18 think at the time the air district wanted all this
19 work done in four years. When we did our
20 analysis, that was not feasible, and our
21 perspective was really the one, from the plumber's
22 perspective. You know, how fast can you fill the
23 tank and how quickly can you put the hats on them
24 and the rest of that sort of thing.

25 We didn't get into the permitting -- I

1 know that the association looked at that pretty
2 closely, and I bet they've got -- here we are a
3 year later, and I'm sure they've got an update on
4 that.

5 MR. LANZA: Thank you. Another part of
6 my question was with respect to the idle tank
7 conversions. You mentioned that there was idle
8 product tankage that could be converted to product
9 storage, and I wanted to know if you had done any
10 analysis concerning how much of the barrier is an
11 engineering versus how much the barrier was a
12 permitting barrier since those tanks are not
13 currently permitted for light products.

14 MR. HACKETT I think that in most of the
15 tanks we looked out were primarily old large
16 residual fuel oil tanks that were associated with
17 power plants. Power plants here in California
18 burn the bottom of the barrel for years and years
19 and years, but in the late '80's and early '90's
20 we switched to burning natural gas for air quality
21 reasons. The tanks are still there.

22 In at least two cases, those tanks have
23 been converted to petroleum service, and they are
24 mostly done with intermediate oils called black
25 oils or with crude oil, but there is still some,

1 though, of these big old power plant tanks
2 scattered around in like inconvenient places. It
3 is hard to get into and hard to get out of. I
4 think we looked at them, again, we were looking at
5 them from of plumbing standpoint as opposed to a
6 permitting standpoint. I don't know about the
7 permitting end, although there is one tank farm we
8 know in the Bay Area that is next to a housing
9 development and an elementary school. We drove by
10 that one and said, "No, this one ain't going to
11 work."

12 MR. LANZA: That one is not going to
13 happen. The final question, you also mentioned
14 the policies of the Los Angeles Port towards
15 conversion to container and cars, and i wanted to
16 know what was driving that policy with respect to
17 the current situation of product tank shortages?

18 MR. GIESKES: I think we had meetings
19 with, very open meetings, with the Port of Long
20 Beach and the Port of LA, and from their point of
21 view I can understand their predicament. The
22 predictions are that container traffic will double
23 from its current 8 million TEU's to 16, and they
24 are desperately looking for land to do that.

25 These new mega terminals require at

1 least 500 acres each, and there are not many
2 places where you can put 500 acres all in one
3 piece in Long Beach and LA.

4 The revenues generated from containers
5 and cars on a simple gross revenue basis are about
6 ten times higher than from boat towing products.
7 I think what the ports tend to forget is that the
8 infrastructure for containers and cars, the
9 investments that the ports or the community has to
10 make are very very high.

11 The Alameda Corridor Project in LA was
12 \$2.2 billion, so if you start working all this
13 investment into each container terminal, it is
14 very expensive to build with shore compacting and
15 two feet of concrete. These are very very capital
16 sensitive projects for the general public.
17 When we look at this, we think that petroleum is
18 actually only in that revenue basis, is pretty
19 attractive to the ports, but the ports also
20 believe that all you need for a petroleum tunnel
21 is a dock and then you can pump it inland. It is
22 very difficult to pump a container inland, I give
23 you that.

24 What we've seen is that actually it is
25 not quite that simple. If you have only a dock at

1 the water with very little storage attached to it,
2 which is the case for almost all the marine berths
3 in LA and Long Beach, you get to see some serious
4 bottlenecks. Either in that case if you go that
5 route, that would have to be miles and miles of
6 additional high capacity pipeline to be laid to
7 the inland tunnels.

8 MR. HACKETT: Having said that, they've
9 got a good example, and that's BP's Berth 121 in
10 Long Beach, it is the super tanker berth there
11 where they've got a big pipe and they've got big
12 pumps, and they've got a lot of storage inland,
13 and they can take that crude oil off the vessels
14 and blow it up to the refineries in the north.

15 It is workable, but, you know, the
16 infrastructure's got to be there to support it.

17 MR. LANZA: Otherwise you have a robbing
18 Peter to pay Paul process going on with respect to
19 the land requirements.

20 MR. HACKETT: Right, there are trade
21 offs. Our opinion is that the port doesn't do
22 their economics the way we would normally.

23 MR. LANZA: I understand that, thank
24 you.

25 MR. SCHREMP: This is Gordon Schrempp

1 with the staff of the Energy Commission. Dave, I
2 had a associated question about the ports of Long
3 Beach and Los Angeles. On slide 26 in your recent
4 trends, if you could go back to that just for a
5 second please. You have a reference under the
6 caveats about the port policies in LA may
7 continually lead to closure of terminals.

8 Is Long Beach left off that list because
9 their behavior has changed recently, or should
10 they have also been included on that list?

11 MR. HACKETT: It is sort of, in all
12 fairness, a lot of the tankage on the water was
13 over on the Long Beach side. I'm sorry, I said
14 that wrong. In all fairness, a lot of the tankage
15 was on the Los Angeles side, but Los Angeles is
16 trying to close the West Way Terminal which is
17 primarily a chemical terminal. They are
18 pressuring Kinder Morgan Berth 118, and the Vopak
19 Terminal, what is it, 186?

20 MR. GIESKES: That's 188 through 190,
21 and there is the tankage off the LA -- let me
22 look. There is the tankage off the LADWP at there
23 are two terminals, 500,000 barrels that were going
24 to be converted to black oil for Vallejo and those
25 will be closed down. In return, Vallejo may get

1 to keep the old tankage and Long Island, but there
2 is considerable pressure, continued public
3 pressure to remove the tankage in Wilmington
4 because they are unsightly, there is a local
5 community center, they are trying to gentify the
6 port there, and terminals are ugly. It is a
7 public perception issue rather than anything else,
8 and that pressure is currently quite strong. It
9 has high level public support to close these
10 terminals.

11 There are actually two idle berths on
12 that same point close to Vopak that would make
13 excellent additional marine berths, and people
14 have been trying to get access to those and
15 mobilize them as new marine docks. All that is
16 hung up while the port is still trying to decide
17 if it wants or doesn't want marine bulk petroleum
18 terminals. I think there is a role there for the
19 Energy Commission to step in and represent the
20 state and in fact the region with Arizona and
21 Nevada also, represent their interest because
22 right now, it doesn't go any further than some
23 locals in evidence of Wilmington would like to see
24 parks and walkways where these terminals are.

25 MR. HACKETT: At the same time, relative

1 to Long Beach, I think we have actually observed
2 that Long Reach has made some moves that are
3 positive versus when we talked to them eighteen
4 months ago. One small terminal company there is
5 going to be able to build a small tank, and then I
6 think that the port had some conversations with
7 another terminal operator that sounded positive.

8 The issue of tankage at the Berth 123,
9 in order to take in crude oil, in the past I think
10 Port Long Beach said no way, and while I don't
11 think they have agreed to it, at least they are
12 listening to the conversation about building the
13 storage there.

14 PRESIDING MEMBER BOYD: Mr. Sparano.

15 MR. SPARANO: Thank you, Jim. Joe
16 Sparano with WSPA. A thought occurred to me as I
17 was listening to Dave and Thomas describe Rule
18 1178 in particular. Here we are all gathered
19 trying to figure out solutions to a difficulty
20 that is perceived as not enough storage, whether
21 storage can help mitigate price spikes.

22 We have a countervailing rule 1178, that
23 is conceived in a manner that forces tankage out
24 of service, and it does so potentially with great
25 expense and maybe even some question as to how

1 long it will take to put the tanks back in
2 service.

3 Even though, I understand, there is a
4 six year schedule, there could be some very
5 inopportune times when the schedule is being
6 carried out where disruptions occur. It occurred
7 to me, the point of this is that perhaps there are
8 ways that we can work both as an industry and CEC
9 to do things that might affectively get 1178
10 repealed.

11 By that I do not mean don't take care of
12 emissions. What I mean is use alternative means
13 to take care of emissions in a more cost effective
14 manner in a way that doesn't take supply of
15 storage off the market.

16 That is just a fundamental that we may
17 not have the means to address successfully, but we
18 certainly have the will with all these people
19 gathered here, and all the good work that's gone
20 on to address the point in that manner.

21 I think it is just an absolutely classic
22 example of one part of our hierarchy addressing an
23 issue one way, and the consequences, perhaps
24 unintended, of that could be something that none
25 of us like when we look at market volatility.

1 PRESIDING MEMBER BOYD: I need to ask --
2 I know the CEC did intervene originally, but was
3 the question of alternative means of solving the
4 problem, i.e. reducing emissions addressed in that
5 context or is this a new thought.

6 MR. SPARANO: I don't know the answer to
7 that, Jim, I wasn't involved in that process, but
8 we certainly look back on it. I would like to
9 offer to give the Commissioners an update as was
10 mentioned. I don't have it available today, but
11 we would be happy to update you on where we are as
12 an industry.

13 PRESIDING MEMBER BOYD: Let me look at
14 my own staff here and see if Gordon or Pat have a
15 thought on that or a response to that.

16 MR. SCHREMP: Yes, Commissioner Boyd,
17 there were alternative approaches discussed at
18 several of the working group meetings that were
19 held over a number of months. Those having to do
20 with changing the time period by which compliance
21 would be eventually achieved to mate more up with
22 a standard maintenance practice of examining one's
23 tanks on a periodic basis every ten, twelve,
24 fifteen years.

25 The meaning is, when the tank was out of

1 service, normally not being used, then put the
2 dome on and not interfere with the tank
3 utilization.

4 That was a period of time that was too
5 long to achieve compliance with a negotiated
6 settlement to achieve reductions in that air base
7 and firm those sources, but in a very specific
8 period of time. It fell outside of that
9 negotiated settlement if you would.

10 MS. BAKKER: That was a court case,
11 right?

12 MR. SCHREMP: That's correct.

13 MS. BAKKER: So, it wasn't within --

14 MR. SCHREMP: Right. Now, can the
15 parties, and I'm not sure if all the parties
16 involved, specifically, but can all those parties
17 reconvene, have more dialogue, and end up in the
18 same place with emission reductions through other
19 matters? I don't know the answer to that
20 question.

21 PRESIDING MEMBER BOYD: Anyway, it's a
22 good question. Any other questions, comments,
23 thoughts?

24 MR. MATTHEWS: I have a question for
25 Dave. You mentioned, and this is my own lack of

1 knowledge about a part of the industry, seeing I
2 had it, maybe others did as well. You mentioned
3 limited access to tankage by independent importers
4 is one of the things on your conclusions. Could
5 you explain about who the independent importers
6 are, and is there an opportunity there to expand a
7 piece of the market here we haven't looked at.

8 MR. HACKETT: Sure. There are half a
9 dozen, I think, trading companies who make some or
10 all their living by importing products into
11 California and other markets, they are
12 arbitragers.

13 They can buy cheap off shore and in some
14 other part of the world, and arrange shipping in
15 order to get products into the California market,
16 into LA, or into San Francisco Bay. I think half
17 a dozen is sort of typical number.

18 In general, these are not vertically --
19 they are trading companies, they don't have gas
20 stations. Some have refineries, but none of them
21 have refineries that are any where close to here,
22 and they don't have crude oil In general, they
23 make their living by buying low and selling high
24 to make a profit.

25 We see them as one more element in the

1 market, I mean, as far as on shore today, there
2 are half a dozen very large firms that are
3 refiners. Most of them have a lot of gas
4 stations, at least some, some have crude oil
5 production and the likelihood that those are
6 generally pretty vertically integrated firms, and
7 as these trading firms, in our view, fill a market
8 nitch.

9 They are able to bring in supplies
10 frequently at costs that perhaps their competitor
11 refiners cannot obtain at the time they need them.
12 We seem them, frankly, as almost a lubricant, we
13 believe that these companies help to provide
14 additional product for the market, and that helps
15 to keep the market more efficient.

16 MR. MATTHEWS: The reason their storage
17 is limited?

18 MR. HACKETT: The reason their storage
19 is limited? Thomas covered that in a slide where
20 he had a breakout of who has what for tanks in LA
21 where he showed roughly 40 percent of the capacity
22 is owned by the refiners and the refineries, and
23 then roughly another 40 percent, we based our
24 assumptions on what we heard and our calculations,
25 we think that the refiners probably at least

1 another 40 percent from the folks outside. That
2 leaves less, I think, less than ten percent of the
3 capacity in the hands of the independent trading
4 companies to operate in.

5 When we talked to them, they said, yeah,
6 we've been able -- since you were here eighteen
7 months ago, we have been able to get a tank here
8 and a tank there, although none of them said that
9 they had enough capacity to bring in a cargo of
10 cargo, 300,000 barrels, and these guys have got 80
11 or 150, and that sort of thing. They don't have
12 anything efficient. We are talking about Los
13 Angeles.

14 In the Bay Area, I think the situation
15 is different. Frankly, my hat is off to ST
16 Services, you know, not only are they building
17 tanks, but they've been able to figure out how to
18 come up with more capacity over the years and so
19 they are able to do some things that competitors
20 down in LA can't do.

21 MR. LAUGHLIN: Mr. Laughlin, can you
22 hear me?

23 MR. HACKETT: Yeah, go ahead Drew.

24 MR. LAUGHLIN: I also want to say there
25 is also a large (inaudible) traders that you

1 mentioned the off shore, or non California
2 refiners. Will they be getting a different bigger
3 plate in the California market? We've got the
4 Citgo, Hovensa, Buena Vesa, European refineries,
5 in particular Neste, Vitol, and Canada, and Irving
6 in Canada, just a name a few.

7 There is quite a large group, but they
8 are not consistent players in California, but they
9 are suppliers now, especially of high quality
10 barrels, or can be suppliers, but they are not a
11 day to day participant in the market and don't
12 want to bring cargos out there unless they know
13 they have a home for those cargos.

14 MR. HACKETT: Drew, when you say -- I
15 don't know if we announced that we have Drew
16 Laughlin on the line. Drew is an independent
17 consultant, made his living as a trader back East,
18 was part of our team with some of this AB2076
19 effort. Drew looked at Gulf Coast supply and
20 demand and looked at U.S. Flag shipping. It was
21 his analysis in all that. He has been hanging out
22 on the phone, at least this afternoon.

23 MS. JONES: Could you -- do you have an
24 idea of how much volume or what percentage of the
25 market is represented by these half dozen

1 marketers? Less than one percent, one percent?

2 MR. HACKETT: I would say less than 5.

3 MS. JONES: Less than 5, thanks.

4 MR. LAUGHLIN: Except during times when
5 you've got a crisis, and then it becomes large
6 because they are your safety valve. They are the
7 group of people, along with the other participants
8 in California that have off shore trading
9 facilities and off shore refinery facilities that
10 will bring in product in California when you have
11 a shortage.

12 MS. JONES: How high would that range?

13 MR. LAUGHLIN: It would be whatever it
14 takes to fill the gap over whatever period of
15 time. We have seen that in the past in '99 that
16 ranged up well over 100,000 barrels a day if I
17 remember, Thomas, you may have the numbers.

18 MR. GIESKES: That's about correct,
19 yeah, but Drew not all of that was actually -- it
20 came from those off site refineries, but was not
21 necessarily imported by them. In most cases, in
22 '99, it was actually the local refiners that
23 stepped up to the plate and bought these supplies
24 and brought them in through their systems.

25 MR. LAUGHLIN: Which is still going to

1 have to be the way things will be done in the
2 future because the outside refiners pretty much
3 have to sell to California refiners in order to
4 move this product into your system.

5 MR. GIESKES: What might be of interest
6 in terms of infrastructure development is if, in
7 deed, there was more readily available independent
8 tankage in the LA Basin that one of these external
9 refiners would say, I want to be a continuous
10 player there, I can make this stuff, I can make
11 money on it if I can rent a tank. Rather than
12 sell it to the local refiners, I want to become a
13 local player.

14 That is a possibility. Currently that
15 doesn't exist, and this plays into your question,
16 Scott. What has changed? Why are the local
17 traders, at least, squeezed out of the market and
18 why, or at least were at one point in time, and
19 why can't independent importers, outsider
20 refiners, easily rent tankage here?

21 I think it has to do with a situation
22 where in the early '90's, a lot of commercial
23 tankage came on the market, there was an over
24 capacity. It was very easy to find tankage, and
25 then as the imports stepped up, and the

1 requirements grew, and gasoline, the amount took
2 off, etc. etc. For all those reasons that we
3 pointed out, the tankage market tightened up.

4 In that situation, the refiners, for a
5 very good reason, decided to no longer contract
6 out their own tankage to the third parties, and
7 also locked up tankage outside in the long term
8 leases. If you are a commercial tank operator,
9 and you can do a long term deal with a major local
10 refiner, of course, you do that rather than rely
11 on spot tank rentals and that's what has happened.

12 The spot tank rental element got dried
13 up because the market tightened up.

14 PRESIDING MEMBER BOYD: As you said
15 earlier, what's missing are the tanks built on
16 spec, and you are suggesting the loan guarantee
17 approach to maybe facilitate those.

18 MR. GIESKES: As usual, supply and
19 demand do their destructive work. If the demand
20 is strong enough, industry will step up to the
21 plate, so we've seen some really recent
22 developments where we had meetings with a local
23 MLP six weeks ago where they said, yeah, we know.
24 We have been looking at this project, we can't do
25 the deal, we have customers asking us, but it is

1 too difficult. Now, low and behold, a couple of
2 weeks ago, they said, yeah, we've got the
3 clearance, we're going to do it. We are going to
4 build tankage under a short term, say, typically
5 three to five year deal, where as previously they
6 would have had required a fifteen year contract.

7 Things are changing, but whether it is
8 enough, and this is new tankage, so that would
9 come under the two or three year type permitting
10 delay. There are some changes in the commercial
11 landscape. Whether there is more that could be
12 done, sure. I mean, always.

13 MR. PEREZ: I've got one question. This
14 is Pat Perez of the Energy Commission staff. It
15 goes back to the infrastructure challenges
16 associated with the Long Beach Berth. In
17 particular, you noted in there that for that very
18 large crude carrier that would be coming in there
19 that at some point in the future, there is going
20 to be a need to bring in perhaps two of those
21 ships a week.

22 I was wondering as part of a two point
23 question or two part question, I may add. One,
24 how far out into the future do you see that need
25 unfolding, and secondly, in the event that those

1 infrastructure improvements do not come about, how
2 will industry respond, and what might be the
3 associated cost of responding with an alternative
4 approach to not being able to bring in two of
5 those ships?

6 MR. GIESKES: That's a very good
7 question. I think what would happen if Berth 123
8 doesn't go ahead, is that you would see increasing
9 -- it is almost like a series of dominoes, Berth
10 121 has already been bottlenecked, and shore pumps
11 have been installed, so if you had to bring in
12 more fees on one to one, which you could do, it
13 would push back some smaller crude carriers.

14 Those crude carriers would probably end
15 up at the shell dock at Long Beach, was it that,
16 86, 82, or 84. That would push out clean products
17 that would have to end up somewhere else. That is
18 why crude and clean products, etc., it is all part
19 of the same product. The whole system would
20 become more congested if you do that.

21 Crude lightering would probably have to
22 increase, and the risk with lightering and the
23 risk with off shore moorings, I know that the
24 companies that do this, take every possible
25 precaution, etc., but it only takes one incident

1 in the Santa Monica Bay, like the incident that
2 was in Huntington Beach in 1992, to shut down an
3 operation like that. That represents very serious
4 exposure to the energy infrastructure of the State
5 of California.

6 It is like the incident with the Exxon
7 Valdez had a great impact on crude supplies. The
8 same thing could happen with one of those
9 operations. If nothing happens, if infrastructure
10 doesn't improve, it just means that the whole
11 system gets tighter, and the risk of these
12 temporary or sort of make do with the current type
13 of operation increases.

14 MR. PEREZ: Thank you.

15 PRESIDING MEMBER BOYD: No one else?

16 Okay, gentlemen, thank you very much.

17 Now, we are going to revisit the
18 California Strategic Fuel Reserve and Dave and Tom
19 will add to the cast of characters, I guess.
20 Dave, I guess we will look to you to be --

21 MR. HACKETT: I'll start it off, and we
22 will continue the tag team match, although Gregg
23 Haggquist is coming up, and he will be talking,
24 and Thomas, Gregg, and I will talk about strategic
25 fuel reserve from the perspective of, you know,

1 what we presented a little over a year ago, that
2 had a tune up in July, and a bit more of a tune up
3 in preparation for this.

4 Dr. Tony Finizza will come on and he
5 will talk about his end of this program as well.

6 PRESIDING MEMBER BOYD: You will tell us
7 what the strategic fuel reserves is and what it
8 isn't?

9 MR. HACKETT: I'll certainly try.

10 The Strategic Fuel Reserve Study was
11 initiated in 2001, essentially as a result of all
12 the volatility in the gasoline in California in
13 1999. There were an extended series of refinery
14 problems, some very large ones, and then some
15 smaller ones, but, you know, fundamentally, the
16 refining industry had a very bad year as far as
17 reliability was concerned here in California and
18 in some degree or other on the West Coast as well.

19 The Energy Commission contracted with
20 Stillwater Associates to look into the issues
21 around the strategic fuel reserve. We started
22 that in August of '98, did a comprehensive market
23 study, we've talked to 65 different stakeholders,
24 we looked at other reserve initiatives, we looked
25 at the -- let me back up a second and say, when

1 the Energy Commission came to us and said, we want
2 you to do this strategic fuel reserve. I said,
3 well, I'm not all that interested in the strategic
4 fuel reserve, these things don't work very well.
5 There are sort of a whole host of problems that go
6 with them.

7 What I would really like to look at are
8 the barriers to supply in this market. If the
9 market is obviously volatile as all get out, and
10 so what are the things that get in the way of the
11 oil industry doing its job and what are the things
12 that contribute to this volatility, and is there
13 something that we can do that government can do to
14 deal with and sort of resolve some of those
15 barriers.

16 We looked at physical, commercial
17 barriers, and we've got a laundry list of it, of
18 barriers.

19 We made a number of proposals, a lot of
20 this is, you know, what is it the government can
21 do to help increase the storage capacity. That is
22 where this loan guarantee idea came from. We also
23 said we are taking the state's money to do a
24 strategic fuel reserve study, let's see if we can
25 figure one out.

1 What we think we did, is we came up with
2 something makes some sense. The reason that there
3 is a room full of people here is that a lot folks
4 don't agree with that particular point of view,
5 and that will be the fight in a little while.

6 Essentially what that strategic fuel
7 reserve is, is a rolling inventory, it is
8 essentially a forward time swap. In order to
9 provide some liquidity in the market so when a
10 refinery goes down, there's barrels to pump into
11 the market. Those get replaced on a guaranteed
12 schedule.

13 When we did all that, we looked at the
14 cost, did a cost benefit analysis, and we said as
15 near as we can tell, this ought to be good for
16 consumers. We also said this is the first cut.
17 In order to get into a lot of the details, you are
18 going to have to study this some more.

19 Okay. As far as the barrier to supplies
20 are concerned, the obvious ones are distance.
21 California is a long way from alternative markets
22 from the Gulf Coast, which has been the
23 traditional source of the next barrels to come to
24 California as well as refineries around the world.
25 Currently, we California consumers, are buying

1 gasoline that is made in Dubai in Eastern Canada
2 and in Finland. We are just a long way away.

3 Product specifications here are tough,
4 we have tough air quality rules, the reformatting
5 gasoline program in California is arguably been a
6 huge success when it come to where air quality is
7 concerned. I really like that I can't see the air
8 that I am breathing, that is good, but that does
9 create a barrier to supply.

10 We noted that refinery expansions have
11 not kept pace with gasoline demand growth, and
12 starting in '99, this became an import market, so
13 what will happen is likely, the bulk of the demand
14 growth in gasoline is going to have to come from
15 imports.

16 We noted this had always been an export
17 market. What does that mean, how does that
18 translate? The refiners were the exporters, I
19 used to be, at one time, Mobile's trading
20 distribution manager, and we had for a while a big
21 export program where we made more gasoline than we
22 could sell in California, and we tankered it out
23 of our Southwest Terminal on Terminal Island to
24 haul around the world, Mexico, the Far East, the
25 East Coast, and the U.S. and the like. It doesn't

1 happen anymore.

2 The export infrastructure can be used
3 for imports, but those imports pretty much go into
4 the refineries, and so what you don't see is a
5 comprehensive system of import capable facilities.
6 There is one in the Bay, there's one in LA,
7 although the one in LA is in large measure full of
8 long term leased gas.

9 We also noted that imports are likely to
10 come from foreign sources as opposed to domestic.
11 As much as anything because of U.S. Flag shipping
12 concerns. We see that the U.S. tanker fleet
13 continuing to decline, and a lack of capability to
14 support large levels of imports from the Texas
15 Gulf Coast into California.

16 We think that the lack of a forward
17 market creates risk for importers, and I know Dr.
18 Williams will want to talk about what we mean
19 about that, I suppose. We will get into that.

20 An interesting one here, is we think
21 that Unocal's gasoline paths reduce gasoline
22 supply. For those of you that have been paying
23 attention, you know, that the FTC now wants to
24 talk to Unocal about exactly how they put all this
25 together, and hopefully the patent office is

1 looking at their activity as well.

2 We said that because of the changing
3 product specs and the overall tightness in the
4 market and the rest of that, that unplanned supply
5 disruptions are likely to be more severe.

6 Our objective here was to do something,
7 and we are concerned about the increasing
8 volatility, I think we have sort of talked about
9 that quite a lot. I know everyone in this room
10 has been paying attention to that. We came up
11 with a criteria for a solution.

12 One thing that was clear to us is that
13 there was a lack of storage capacity in
14 California, so that needs to be fixed. When we
15 were thinking -- actually, what we did, was we
16 looked at all the strategic fuel reserve, or the
17 fuel reserves, the heating oil reserve in New
18 England, crude oil reserve in caverns in Texas,
19 and Louisiana and others around the world. We
20 looked at those and said what are the problems
21 with these things, and then how can we work around
22 them. We are not talking about something that's
23 got a supply overhang. We think the product is
24 likely to flow through it rather than being
25 stagnant. It will have to be integrated to the

1 refine centers.

2 The Energy Commission did a strategic
3 fuel reserve study, let's call it, ten years ago,
4 at that point, they said well, let's build 5
5 million barrels and let's put it in Stockton and
6 let's connect it to the water with an 8 inch pipe.
7 If you could get it filled up, you could never get
8 anything back out of it.

9 We are talking about here is system that
10 is integrated with the rest of the market and has
11 open access, that is to say any qualified
12 participant can be involved. Frankly, what we are
13 looking to do here is mitigate the physical and
14 commercial risk for people bringing barrels into
15 the market.

16 As far as recommendations are concerned,
17 for those of you who tried to follow this on the
18 internet, we are now on slide six. Permitting --
19 if you can rationalize the permitting process is
20 so that these facilities can get constructed in an
21 appropriate amount of time, we think that will
22 help.

23 As far as the reserve itself is
24 concerned, what we said was that the State ought
25 to issued a tender to build 5 million barrels of

1 capacity, 2 million barrels in the Bay and 3
2 million barrels in Los Angeles. The reason for
3 the split, that's roughly the size of the market
4 percentages between the Bay and LA.

5 Those facilities have to have deep water
6 access, and they have to be connected to the
7 distribution system, and that half that volume
8 would be subleased to market participants.

9 Essentially, we would build 2 1/2
10 million barrels, we would subsidize the
11 construction of 2 1/2 billion barrels in order to
12 attract volume in, and then the state has the
13 ability to fill up the other 2 1/2. They do that
14 with summer grade CARBOB.

15 California reformulated blend stock for
16 Auction 8 blending. That's the kind of gasoline
17 the majority of the refineries in California are
18 making a day, that is to say it is a ultra clean
19 gasoline with very low volatility that's been
20 reformulated to be blended with ethanol at the
21 truck distribution terminals.

22 In this process, that volume would be
23 acquired in an appropriate manner, for example,
24 during the winter when normally demand is low and
25 in general production -- the ability to produce

1 gasoline is higher in California or it could be
2 brought in with imports.

3 Qualified participants can withdraw and
4 repay the volumes for a fee and we will give you a
5 little demonstration of that in a moment. The fee
6 is going to be determined by an electronic
7 auction.

8 We recommended to conduct a next stage,
9 more detailed design to look at the various
10 offering alternatives, and auction mechanisms, and
11 to design the oversight functions.

12 We took this recommendation down to the
13 level to where we thought -- we didn't see any
14 killer concerns as far as our analysis and at that
15 point, we stopped the analysis, and wrote the
16 report.

17 MR. GIESKES: You skipped one.

18 MR. HACKETT: I skipped one.

19 MR. GIESKES: Two at a time. There you
20 go.

21 MR. HACKETT: I have fat fingers. What
22 was proposed? Here in this diagram, you see two
23 ships on the left, a block that represents tankage
24 in the center, and then the infrastructure
25 distribution system on the right.

1 What we see here is that the gasoline
2 bank will be co-located with other tankage,
3 private tankage. One of the complications that we
4 observed when we were doing our studies last year
5 was that because the new grade of gasoline,
6 CARBOB, is so difficult to make, there are very
7 few refineries, off shore, or the West Coast that
8 express the interest in making it.

9 At the time, we identified two,
10 subsequently a third one has come on board.
11 Probably over time, there will be more and more.
12 What we expected would happen was that much of the
13 imported material required to make gasoline in
14 California, instead of being finished CARBOB,
15 would in fact be blend stocks. Those blend stocks
16 would be things like raffinate, isooctane, and the
17 like.

18 What we saw was that importers, whether
19 they were independent traders or potentially
20 refiners and maybe refiners from other parts of
21 the world, would put these blend stocks into the
22 least side of the petroleum reserve and probably
23 their blend, the CARBOB.

24 Alternatively they could put it in there
25 and hold it, and then sell it to the refiners when

1 the refiners had a need. That is one of the
2 reasons this needs to be interconnected to the
3 refiner system and so there would be a free flow
4 of blend stock and gasolines back and forth.

5 We also did see CARBOB being imported or
6 otherwise stored in the gasoline bank, and the
7 stuff that wasn't imported would likely be
8 purchased from local refiners.

9 There is a private side and a public
10 side to all this, and then you know how would it
11 work. Let me go to the next one. The initial
12 fill would be purchased gradually, and over time,
13 not to offset the market, we thought the cost
14 would be about \$25 M a year, but that doesn't
15 include any offsets for the initial fill under
16 Federal Energy Policy and Conservation Act or fees
17 from auctions.

18 What that Energy Policy and Conservation
19 Act means is that there have been provisions in
20 federal statutes to have addition petroleum
21 reserves, sort of local petroleum reserves.

22 Alternatively, you could say that, you
23 know, the Feds could sell crude out of the SPR in
24 Texas and use the money to buy gasoline in
25 California. You could argue that we taxpayers

1 already paid for this stuff. At any rate, we
2 thought the cost would be relatively low.

3 How does it work? We see that
4 participants would withdraw the product as a
5 result of an auction. Let's say there was some
6 sort of refinery upset. Market participants could
7 then go decide how they wanted to do their
8 business, one of their opportunities might very be
9 to come to what we call the gasoline Bank of
10 California, and initiate an auction. The auction
11 would be held electronically and then the winner
12 determined fairly quickly.

13 That winner would then be able to lift
14 the gasoline out of the bank on a prompt basis,
15 but it would have an obligation to return it
16 within a fixed period of time, let's say six
17 weeks, which is roughly the time it can take to
18 arrange a shipment from the Texas Gulf Coast.

19 We thought it was appropriate that any
20 qualified participant could be in this. Qualified
21 participants likely are people that currently
22 trade the spot market, who are refiners, the
23 people who have got the credit worthiness to play
24 in this market as Dr. Williams said to you, you
25 know, buy a million dollars worth of gasoline.

1 We thought that the trading rental
2 lifting rights and replenish obligations would
3 create a satellite market that would likely
4 improve liquidity.

5 Those are the features at the high
6 level, and did I skip another one? This aspect of
7 the study is the one that is the most
8 controversial. I don't think we get a lot of push
9 back from industry on permitting and marine
10 infrastructure and the rest of that.

11 Some of the push back, you know, is
12 contained in this list. It's the government
13 interfering with industry. There were complaints
14 that the design lacked detail. There was some
15 discussion around the inventory availability and
16 usage. Marine infrastructure, we just went
17 through, I didn't get any push back, at least at
18 this point, on that.

19 We did talk about capacity expansion of
20 in state refineries. I think some of our
21 colleagues here said, you know, that's the
22 smartest way to go as far as increasing supply to
23 the state, we absolutely agree with that, but
24 there is no argument that I think that at least to
25 some degree, that's part of the permitting

1 discussion.

2 We said that we thought that the
3 development of forward markets was useful, but
4 there were some other ideas about how that could
5 be done, and then I think there was some push back
6 on the cost benefit analysis. We are going to get
7 into those.

8 MR. GIESKES: Thomas Gieskes. Once
9 again, it is my duty to bore you with the details.
10 Hang on, no, there's still some interesting slides
11 here.

12 (Laughter.)

13 MR. GIESKES: No government interference
14 which has been cited, indeed, as one of the
15 controversial issues on our original proposal.

16 We say the government does have a
17 legitimate role to insure competition, and also,
18 there is a role for the state government in
19 particular to safeguard the security of supply of
20 essential commodities.

21 The concept, as we proposed it, aimed to
22 do, would limit the government role to facilitate
23 the building of storage, which would actually be
24 under the private sector. Not to try and be
25 smarter than the commercial industry, I mean, you

1 can do this on state tenders. You can also farm
2 out the actual auction process to commercial
3 parties. There are several parties who would be
4 extremely interested in doing this, NYMEX being
5 one of them.

6 The government role would be,
7 essentially, limited to oversight. It is making
8 inventories available to private industry by
9 underwriting bank loans on new storage capacity.
10 That is similar to other roles that the government
11 occasionally has, especially for infrastructure,
12 where it does provide that type of economic
13 stimulus package.

14 We feel that much of the criticism in
15 this area was actually unleashed upon us, even
16 before the report came out, and much of that is
17 because strategic fuel reserve reserves, that was
18 a misgiving that we had ourselves going into this
19 study is the charge word, and historically those
20 haven't worked very well.

21 The other controversial issue that we
22 faced after the initial presentations and after --
23 in July last year, when we presented the final
24 draft report was that there was a certain lack of
25 detail. We hadn't really presented all the

1 details yet of how is this thing going to be
2 built, how is it going to be operated, etc., so
3 what we said is, in all fairness, this is a
4 feasibility study. That was the charter of
5 Stillwater was to conduct an early stage
6 feasibility study.

7 That was, essentially, an analysis of
8 the commercial and physical supply barriers. When
9 we found there was a consumer savings to be had,
10 that there were orders of magnitude higher than
11 what we predicted as cost, all we said is hey,
12 here are sufficient grounds to go into the next
13 phase of a design of such a reserve.

14 In projects of this magnitude, you go
15 through several design stages, the early
16 feasibility study is usually followed by something
17 that is called (inaudible) Engineering Design
18 Feed, where you go into a level of design that
19 then allows you to pull the trigger on actual
20 execution, then you go and build and do.

21 These successive design steps -- we felt
22 that we were in a way unfairly criticized, we were
23 told we don't want to go ahead with this project
24 because the design isn't there, and all we were
25 asking for is more -- we have to go into the next

1 phase and develop these details.

2 Enough about that, let's move on to some
3 of the details that I now need to bore you with.
4 One of the essential issues with the adding
5 storage in the hands of the state providing what
6 we saw was not really storage, but sort of
7 pipeline fill for imports. To what extent might
8 it crowd out private inventories currently held.

9 In other words, if you add 2 million
10 barrels of additional discretionary inventory,
11 which this would be, is that going to mean that
12 other parties are not going to hold equivalent
13 volumes, so you spent the \$25 M per year of
14 precious state finances. You don't see any real
15 benefits.

16 What this would require for us, and
17 other arguments all had to do with storage, there
18 were sounds being heard like existing tankages
19 being adequate, California has never run dry. An
20 argument that I can certainly feel some sympathy
21 for, if you sponsor tankage that will be benefit
22 independent importers, you actually damaged those
23 deeply invested in the California market.

24 Another argument was inventories in the
25 U.S. in general are not much better than

1 California. Finally, private industry will fill
2 the need if there is one.

3 What we have seen in this sort of rerun
4 of the study in the more recent meetings that we
5 had, in particular, in the work that we did for
6 the marine infrastructure, is that of all these
7 arguments, only the latter was to have found to
8 have real merit.

9 Private industry is, indeed, stepping up
10 to the plate and tankage is being built. Some of
11 it is very expensive, and some of it between
12 parties that we thought would be commercially
13 incompatible, but it is taking place.

14 Is it sufficient, and this argument of
15 crowding out, to what extent do we have to fear
16 it? We think the situation still remains
17 critical, and that there is still a lot of work to
18 be done.

19 With that, let me take a very broad
20 outlook, and we are on slide 15 now, Petroleum
21 Storage in California. There is an awful lot o
22 tankage out there. In total in the large
23 refineries there is over 1,600 storage tanks, 103
24 million barrels of capacity. There is a lot of
25 tankage out there. A lot of it is in crude

1 service.

2 We have compiled this breakdown, I won't
3 run through all the numbers. We have compiled
4 this breakdown on the Permit Registry for
5 Aboveground Storage Tanks, and then going through
6 these one by one, and especially in the category
7 of the small terminals, what is this.

8 Oh, that is a small terminal in
9 Bakersfield, I know that is a crude production
10 related tankage, or this is a truck rack terminal,
11 or this is etc. Based on that breakdown, we were
12 able to compile a fairly accurate picture, but it
13 will always remain a moving target of all the
14 petroleum built products in California.

15 Before I go any further, the question
16 always remains that even in a very very tight
17 storage market, there is 9 or 10 million barrels
18 of gasoline that doesn't move. Why isn't that
19 moving? There is a certain minimum amount of
20 barrels that will sit in tankage that is held in
21 refineries, that are simply products in transfer
22 or tanks that you can't use.

23 Let me back up a little and do a sort of
24 Petroleum Storage 101, and for those of you who
25 are very familiar with this, I apologize. A

1 typical gasoline tank will have a floating roof,
2 the floating roof has legs. When you empty the
3 tank, you cannot land -- normally speaking, under
4 most typical permit conditions, you cannot land
5 the roof on its legs on the bottom and then draw
6 the tank completely empty because that would
7 create a vapor space underneath the floating roof.
8 Once you fill it up again, you would displace
9 those vapors, those vapors would cause emissions,
10 and also there is a certain exposure risk when you
11 do that. Plus, you can damage the coating on the
12 bottom, etc. etc. etc.

13 Landing a roof is only done in special
14 circumstance, for maintenance, unless you have
15 very special provisions. That heel in the
16 floating roof storage tanks can be as much as 8 to
17 10 percent, so that is a lot of volume, that is 3
18 or 4 million barrels in California sits in the
19 tank heels, which you will not be able to touch.
20 Then of course, on the top, if you talk gross
21 barrels, there's also some empty space at the top
22 that you can't really go into.

23 That is the unusable space in a given
24 storage tank. I'm on slide 17 now, if you look at
25 the use of tankage in refinery, the refinery, of

1 course, is true tankage at the input and the other
2 feedstocks, then there are some other feed product
3 tankage, and then there is a lot of tankage that
4 is associated with gasoline, blending components,
5 and blending of gasoline, different grades of
6 gasoline for Arizona, premium gasoline versus
7 regular gasoline, etc. All these different tanks
8 in their different service, could be half full,
9 and yet you are not able to put the barrels on the
10 pipeline for tomorrow's delivery schedule.

11 There is a lot of volume in California
12 that is just sort of a minimum inventory required
13 to keep what we call the system wet. If you are
14 pumping from say a refinery to distribution
15 tankage and you own your own pipeline, there could
16 be a tank at the one end that is half full, and
17 there is a tank on the other that's half full, and
18 both are being transferred into inventory that's
19 not readily available yet at that stage.

20 There is a lot of inventory in
21 California that is simply tied up, and we'll talk
22 later -- this is not good. Sorry about that, I
23 hit the wrong button here. Here we go.

24 Let's talk about how refineries actual
25 manage their inventories. Old refiners have

1 scheduling and planning departments, a lot of very
2 very smart people working there, these are the
3 people that get the Friday, 5:00 phone call and
4 the midnight crisis and carry beepers. It is a
5 very hectic world.

6 They work with the marketing people,
7 based on forecasts, plan for certain inventories
8 and routinely work with the traders inside the
9 market to make sure that everybody on the staff
10 knows how much inventory is available at any point
11 in time,

12 The major element of refinery inventory
13 planning has to do with annual turn arounds.
14 Major refinery units have to be shut down
15 periodically for inspection and maintenance, and
16 refiners plan around that.

17 Those major turn arounds require
18 substantial inventory planning, that is planned
19 typically a year and a half, two years in advance,
20 this sort of planning process starts, where shall
21 we get the volume from, where are we going to
22 store them, do we have sufficient tankage to
23 bridge it, how can we bring in the additional
24 barrels.

25 That is a very complicated planning

1 process, and in that, some margin for error is
2 usually built in, but as you have seen this very
3 spring, where a major refiner over ran their turn
4 around period by about two weeks, that causes
5 serious problems.

6 Let's talk about the types of different
7 inventories here for a second. Operational
8 tankage has three types of operational tankage,
9 you can have a tank that is sort of set aside for
10 upsets, for process upsets, normally the inventory
11 would be around 50 or 60 percent. If you have an
12 upset with the upstream unit, you can draw down
13 and keep the downstream unit operating. If on the
14 other hand, you have an upset in a downstream
15 unit, you can fill up the tank and keep the
16 process alive.

17 There are process buffer tanks,
18 typically for instance, gasoline is produced, it
19 is run down in the batched tank. When that tank
20 is full, you take a sample, it's analyzed, it's
21 cleared, and then it gets transferred. Those
22 tanks cycle between full and empty on a continuous
23 basis on the average inventory level would, once
24 again, would be around 50 percent. That is what
25 you would expect to see.

1 You have tanks that are reserved for
2 loading or off loading of ships or rail cars and
3 trucks. Those tanks also cycle between full and
4 empty, but on irregular schedules. It would be
5 timed to the arrival of the ship.

6 On all three types of operational
7 tankage, if you look at the aggregate inventory
8 curve for a large number of tanks, you would
9 expect to see a little zig zag line around the 50
10 percent mark.

11 There is strategic storage, which
12 includes the build up for turn arounds, the stock
13 that is carefully built up and then used over time
14 to maintain sales while certain key units are out
15 of service.

16 There is finally discretionary inventory
17 that is used for marketing purposes. We expect
18 the price to go up, we will sit on some barrels.
19 These barrels should be worth more next week than
20 this week. This is when markets are in contango,
21 and has been explained this morning. Those are
22 discretionary barrels held specifically for
23 marketing purposes. It is those barrels that
24 people say would be displaced when a strategic
25 reserve would be available.

1 Let's take a look now at now at the
2 observed inventory behavior, and this is a busy
3 graph. The red line represents the retail price
4 in dollars per gallon, and down at the bottom it
5 says finished gasoline with on top of it the
6 blended components.

7 This is California refinery inventories,
8 which is CEC data, includes the Bay Area
9 terminals, but not the bulk terminals in the Bay,
10 and later on, I'll do a reconciliation of all
11 California inventories with this particular
12 reporting system. These are reported on a weekly
13 basis by the CEC.

14 What you see first of all at the bottom
15 here, is that the finished gasoline line is a line
16 which is actually very closely between 40 percent
17 and 60 percent of tank capacity. I'll come back
18 to that later. This is typical inventory behavior
19 for operational tankage.

20 There is very -- if you look at how this
21 moves, with the price and this is retail price,
22 and we could have plotted spot price in here as
23 well, it would have shown the same behavior.
24 There is very little evidence in this inventory
25 behavior that -- the sizeable quantity of stocks

1 is held, and then sold off when the price is
2 right. We can't see any. What seems to happen is
3 yes, there is inventory build up in the fourth
4 quarter for turn around coverage, you see the same
5 inventory spike here, which is then drawn down
6 over the end of the winter period as turn arounds
7 are wrapped up and people switch over to summer
8 where blending.

9 What seems to be the case is that for
10 most of the rest of the year, inventories just
11 happen. Once you get out of this summer grade,
12 people are at the low inventory, that is when the
13 market takes off, and from there on, it is really
14 off to the races.

15 If there is an upset at the low
16 inventory level and the market gets very sensitive
17 to bad news when inventories are low, traders will
18 watch that inventory number very closely. If
19 there is even a rumor of outage when inventories
20 are low already, the prices will take off.

21 Moving on, let's try to reconcile the
22 reported inventory numbers.

23 UNIDENTIFIED SPEAKER: Quickly.

24 MR. GIESKES: Quickly, yeah, oh sorry.

25 Over all, reported inventories in California, this

1 is the number that most people are familiar with.

2 Maximum reserve is about 35 million and minimum is

3 25. When the market falls below 27, the market is

4 said to be very very tight. This is overall PADD

5 V, which includes all the western states.

6 EIA also reports the inventory, this is

7 including pipeline terminals. If you take the

8 pipelines out, numbers drop, it's about 3 million

9 average held up in pipelines.

10 The EIA also reports total California

11 numbers for refineries and bulk terminals on a

12 monthly basis. This range is from 14 almost 15 to

13 23, and then finally this is the range that was

14 just shown, this is the CEC report, refinery

15 inventories, plus the Bay Area terminals.

16 The difference here if you scale this up

17 from 26 to 42, is in very good agreement with this

18 range, so it is still all these inventories, sort

19 of move in a narrow range between 40 and 60

20 percent, which corresponds to what you would

21 expect to see in operational inventories rather

22 than indiscretionary inventories for marketing reasons.

23 The breakdown of these inventories into

24 gasoline and blending components in the refinery,

25 as you would expect, in the refinery and the

1 weekly California numbers, which is refinery and
2 Bay Area terminals where gasoline blending takes
3 place, there is a substantial inventory of
4 blendstocks. In fact, blendstocks are on average
5 more than finished gasoline.

6 The refinery overall, this includes bulk
7 terminals and the large distribution terminals,
8 the split is more than two thirds off finished
9 gasoline and one third of land sludge.

10 What we see is, on average the U.S. has
11 about three days more of inventories in finished
12 gasoline than California has. Three days doesn't
13 sound like a lot, but if you have nine days only,
14 then it is 30 percent more. Also, really the U.S.
15 has a much more robust distribution system for
16 gasoline.

17 There's a vast network of long distance
18 pipelines. There's a lot of inventory in those
19 pipeline. There is about 30 to 40 million barrels
20 of gasoline in the pipeline systems east of the
21 Rockies. There is some flexibility in there. You
22 can use those there a little bit and get some
23 pipeline gasoline out, by putting pipeline diesel
24 in.

25 Essentially, California inventory should

1 have been higher. We have this special grade of
2 gasoline, we are isolated, long supply routes. If
3 you have a refinery upset of say even the 250,000
4 barrels a day large refinery outage in the Gulf,
5 it isn't really that much of an impact on the 7
6 million barrels a day total refining capacity in
7 that part of the U.S.

8 In California, you have a 200,000 barrel
9 a day refinery outage, you're talking about a
10 quarter of the operational capacity. A lot less
11 robust system here or inventories are 30 percent
12 lower in terms of days off storage.

13 The recent changes, and we talked about
14 this in the introductory parts, this is redundant.
15 I can skip this pretty quickly. I mean, the
16 recent changes are that 20 companies are willing
17 to sign term contracts, and a few are willing to
18 step up to the plate and build you tankage and
19 there is more tankage under way now. This has
20 been shown before as well in terms of clean
21 products alone, there is 1.4 million barrels of
22 firm additions.

23 Let's come back to this crowding out
24 argument. If we look at it, what crowding out
25 might mean in terms of what the proposed SFR

1 volumes might do if they were stationary
2 inventories sitting there hanging off the market,
3 then they would do nothing to operational
4 inventories.

5 Operational inventories are very very
6 tight, and nothing will change that in refineries,
7 not even in terms of planning for turn arounds.

8 How much discretionary inventory is
9 currently held? Looking at the market, it is
10 interesting to see this morning that similar
11 figures were mentioned that about 25 percent of
12 the storage was discretionary.

13 We, indeed, believe it is about 0.5
14 million barrels, 15 to 25 percent of the effective
15 4 million barrel operating range.

16 Even if all current discretionary
17 inventory was crowded out by the event of 2 1/2
18 million of barrels of state owned reserve, then
19 you would have a 2 million barrel net addition,
20 which is a four fold increase.

21 That is a very effective increase
22 because the discretionary inventories, the barrels
23 that people have on hand and can immediately
24 release in the market, is what was discussed this
25 morning by Dr. Williams, that is the effective

1 inventory to quell a price increase.

2 In the current market of tankage, what
3 would happen indeed if that discretionary barrels
4 sit in tankage in terminals, etc, or at
5 refineries, it would be reused. The operational
6 tankage is so tight, especially in the LA Basin,
7 that tankage would not sit idle, not in an
8 environment where people are willing to pay twice
9 of the market price used to be to get barrels back
10 on stream as is currently the case.

11 In summary, the California gasoline
12 inventories move in a narrow range of about 40 to
13 60 percent capacity, 15 to 25 million barrels and
14 42 million barrels of total bulk tankage. The
15 finished gasoline inventories in that total
16 inventory are between 10 and 14 days of
17 consumption or 9.6240.3 if you want to be precise
18 versus 13 to 17 days for the U.S. as a whole. A
19 minimum of around 10 million barrels is really
20 what it takes to keep the system wet, that's tank
21 heels of 3 and another 4, and also it's
22 inventories that you can't really touch.

23 If those inventories, if that 10 million
24 barrels was really usable, and at times when
25 gasoline trades at one point were \$5 per barrel,

1 could have made a fortune by selling it -- those
2 barrels are really tied up, really really tied up,
3 which gives you an effective finished gasoline
4 operating range of 4 to 5 days of consumption.
5 That is not a lot, it really is not a lot. In
6 actual fact, it's a compliment to the skills of
7 the planners and schedulers that the California
8 system functions as well as it does.

9 In all that tight tankage, we still have
10 to deal for the next six years with Rule 1178, and
11 clean product tank rental rates are at a historic
12 height, I mean, it is what, \$.50 to \$.60 a barrel,
13 tankage is not committed at \$.80 a barrel. At the
14 U.S. Gulf Coast, you pay \$.25 a barrel. That's as
15 good a measure of the tightness of the tank market
16 as any.

17 We believe that the argument of crowding
18 out is not a credible counter argument, not to do
19 this. You might not want to do this for other
20 reasons, but the crowding argument is pretty weak.

21 There is a significant exposure for the
22 state in terms of this very tight storage in an
23 essential commodity.

24 Which brings us to capacity increase,
25 which was another argument, a very valuable

1 argument, brought forward by the refining industry
2 and the consultant they hired to look at our work.

3 We also believe that state refinery
4 capacity is indeed to be the preferred mode of
5 supply, it should always be cheaper than imports
6 of very rare blending components coming in from
7 half way across the world.

8 When we looked at how refinery capacity
9 has developed over the past decade, we don't
10 really believe that you could easily bring
11 additional capacity on stream.

12 There are two ways of doing it, one is
13 in discrete projects, discrete additions, new
14 units, etc. etc., and the other is what was
15 mentioned this morning is small improvements in
16 operating procedures or small additions and
17 equipment, and that is usually referred to
18 capacity creep, although that it is a charged
19 word.

20 The obstacles to those small
21 improvements are that the Title V Operating
22 Permits very often have capacity limits. If you
23 are right up to the limit, even a very small
24 percent increase can cause you to have to re-
25 permit the entire facility, and there is a

1 diminishing return once you reach the end of the
2 learning curve.

3 Most of the low hanging fruit, the easy
4 improvements, have long since been made, and right
5 now it's difficult to find additional
6 improvements. As was pointed out by Mr. Sparano
7 this morning, it's not easy to justify any form of
8 capital investment in refineries in the current
9 unsettled climate.

10 What is the history of capacity
11 improvement? These two graphs, and I'm on 31 now,
12 show development in crude runs. The two ways to
13 increase capacity is either you run more crude
14 through your unit, and you have to go deeper into
15 the barrels that you process.

16 What we saw over a twelve year period is
17 that, on that ridge, being about .3 percent per
18 year or 63,000 barrels a day total improvement in
19 crude run capacity in the state's refineries.

20 More significant is what the refiners
21 have actually achieved in terms of how deep they
22 can dig into the barrels, so this bottom graph
23 shows the California production of residual fuels,
24 and right now that is down from around 150 ten
25 years ago to less than 50,000 barrels a day on

1 average today.

2 That is a very significant achievement,
3 however, you are rapidly approaching here the
4 theoretical minimum, which is really the bottom of
5 the barrel. There's not much room left there.
6 What we have taken into account in our forecast of
7 production capacity was sort of a .6 percent real
8 net, effective capacity creep, inside the refinery
9 fence.

10 What you see in terms of output increase
11 from the refiners is more like 1.6 or 1.7 percent,
12 but that includes increased imports of blending
13 components.

14 The recent track record of refinery
15 projects is not good and this comes under the
16 heading of permitting rules, and there's a lot of
17 people in this room that have the scars to show
18 for it.

19 The 20,000 barrel a day increase in
20 Tesoro's Golden Eagle Refinery, actually, is not
21 really economical, it had to be forced in through
22 the permitting conditions as far as we understand
23 for our discussions in the shareholder meetings.

24 The Valejo Wilmington several years ago
25 had a project to add crude capacity and would have

1 resulted in many additional gasoline barrels,
2 their project died in flames largely through
3 lawsuits brought by CBE.

4 CENCO, another failure to bring
5 additional refining capacity on stream for a
6 number of reasons, plummeting difficulties not
7 being the least of them.

8 There is, however, new capacity on the
9 horizon, not exactly in California, but within the
10 easy shipping distance elsewhere on the West
11 Coast, so there is projects in Washington by
12 ConocoPhillips and Tesoro which would add some
13 barrels.

14 Of course, then the global refiners can
15 bring in barrels, they can optimize their refining
16 systems all around the world and California prices
17 would tend to walk away from world gasoline
18 prices, you would see an increase in that type of
19 supply.

20 In summary, refinery capacity increased
21 the potential for capacity creep is limited. We
22 are approaching the bottom of the barrel, and
23 there are all these operating permit constraints
24 that were discussed in detail this morning.

25 Capital projects for major expansions,

1 we would like to see those, and we are fully
2 supportive of (indiscernible) in that sense, but
3 it's not going to be easy to do that.

4 With that, I would like to turn it over
5 to Gregg, who will extol a little bit further on
6 the forward market.

7 MR. HAGGQUIST: Thank you, Thomas. It's
8 okay, it's time for a natural break, or is it okay
9 to keep going. What do you think?

10 PRESIDING MEMBER BOYD: Would the
11 audience like a ten minute break.

12 MR. HAGGQUIST: We've been sitting
13 through it for a long time.

14 PRESIDING MEMBER BOYD: I think it's a
15 good idea.

16 MR. HAGGQUIST: Yeah, let's shift gears.
17 Okay. I have to think what to say.

18 (Off the record.)

19 MR. HAGGQUIST: Stop milling around back
20 there. Well, that was on the record.

21 We are back at the question of forward
22 markets, and as you know, this morning we talked
23 about the forward markets and the futures market
24 with Dr. Williams.

25 The perspective here is a little bit

1 different because the orientation, let's say the
2 visual orientation of the geographical orientation
3 that we were looking at this morning was pretty
4 much downstream of the refineries.

5 This particular proposal, Strategic Fuel
6 Reserve, looks at California as an island that
7 physically, literally, as a geographic island and
8 remote from resupply, and the question that we are
9 trying to explore here is the interrelationship
10 between price arbitrage, physical inventories, and
11 paper and forward markets and physical markets.

12 In fact, Dr. Verleger, who is here
13 today, wrote a nice paper about this a couple of
14 years ago, the conversion of physical and paper
15 markets and what arbitrage is.

16 Arbitrage is the buying of a commodity
17 in one market and selling it on another
18 simultaneously to capitalize on a price
19 differential between them.

20 We know here in California that the
21 supply chain is a long one, the resupply when we
22 need it has to come from three weeks to one month
23 away. This is a problem. Thomas Gieskes
24 mentioned, and I think it is important, to think
25 about this almost visually again, that this

1 strategic reserve concept, this rolling inventory
2 concept, is not a stagnant concept. It is not a
3 stagnant inventory, it's like line fill in a
4 pipeline, like the line fill in colonial pipeline
5 from Houston to New York.

6 If Colonial Pipeline were empty like we
7 are now when we run out of gasoline here, you
8 would have to put the barrel into Colonial
9 Pipeline in Houston and wait for the three weeks
10 for it to arrive in New York before you could sell
11 it. You wouldn't have that continuity of the
12 physical flow and at a price in the forward
13 markets. The momentum of the forward markets
14 follows a physical flow as Dr. Verleger's paper
15 pointed out.

16 The rolling inventory, the strategic
17 reserve, as we see it, would stimulate this
18 process, connect us as a pipeline does, connect us
19 to the international markets.

20 The risk of the California market is
21 difficult to hedge today because of the thinness.
22 Now this morning we said the forward market is
23 adequate. It is adequate for what is the
24 question? It is adequate for that market that we
25 were talking about this morning, the downstream

1 jobbers and distributors, but is it adequate for
2 "California itself as an island in the global
3 matrix of supply flow", is it or is it not?

4 The problem in the global system is that
5 the absence of risk reduction tools means that the
6 rewards have to be higher before you will put a
7 ship on the water. Having done this like other
8 traders in here for many years, I know how it
9 feels to put a ship on the water and not know what
10 the price is going to be at the other end three
11 weeks from now, four weeks from now, so you need a
12 pretty high incentive to take on that risk because
13 the market could collapse.

14 Nobody is there to guarantee that for
15 you, you have to decide whether to assume that
16 risk. The problem here tends to be, in
17 California, that these decisions are delayed by
18 the lack of a forward market at all, lack of
19 transparency in one. The price spike has to be
20 significant, it has to be pretty high in order to
21 flow these cargos into California.

22 The note here that says the importance
23 of hedging price risk is greater for the
24 independent importers than for integrated refiners
25 is I would say maybe controversial and we will

1 probably have push back on that, but the way -- if
2 you look at an integrated multinational, and
3 you're going to the street price in Colton,
4 California or San Diego and a supply is coming in
5 from Australia or from Rotterdam, there is a
6 continuity of flow. There is an internal transfer
7 pricing system.

8 Each integrated company looks after its
9 own downstream needs, so there is no one in the
10 market to look for the aggregated needs of the
11 market. If each of the integrated companies is
12 looking after its own system, let's say they are
13 five systems, it is a problem between the systems
14 that causes the price spikes when supply doesn't
15 meet demand at the aggregated level.

16 What is the principle of hedging? We
17 all know what it is, I don't think we need to
18 dwell on it too much here because I think every
19 thing we say here will be ultimately debated, but
20 hedging means you lock in some known margin to
21 protect your downside risk with a futures contract
22 of some kind, a forward contract of some kind.

23 The buyer and the seller incur risk, the
24 price we fixed now for future delivery will be out
25 of line with the then prevailing market rate.

1 What that really means is that if we load a cargo
2 in the Caribbean, if a Caribbean supplier loads a
3 cargo and sends it here, he wants some offsetting
4 risk, he wants to know that he is going to be able
5 to sell it. By the way, is Drew Laughlin still on
6 line?

7 MR. LAUGHLIN: Yeah.

8 MR. HAGGQUIST: What do you think about
9 that? Do those suppliers need to have a backstop
10 here before they send cargos here?

11 MR. LAUGHLIN: Yes, especially knowing
12 that they may have to sell it to other refiners or
13 to competitors. They need to understand a couple
14 of things, they want to make sure that can get it
15 off loaded, but they want to make sure they get a
16 reasonable -- as you said they want to get a
17 return on their investment or not send it.

18 They don't need to send the material out
19 there unless there is basically an economic
20 incentive to do it. They would prefer to have a
21 locked in deal. Right now, that mechanism is
22 trying to sell the refiners that they exist out
23 there, and let them purchase it in the forward
24 market.

25 MR. HAGGQUIST: Right, okay. Now we

1 have a note here that the central clearing house
2 collects paper trades. This is true in
3 sophisticated very liquid markets. We don't have
4 such a clearing house here. We may have some
5 comments later by NYMEX on how such a clearing
6 house could be established, but a market the size
7 of California gasoline, a million barrels a day,
8 arguably ought to have some means of hedging or
9 clearing risk, more efficient than we have today.

10 When we are trading at, you know. \$.50 a
11 gallon above the rest of the country for a month
12 and more, you say, is there something wrong with
13 this picture, or isn't there? Overall, the paper
14 market and the physical market has to match up.
15 The physical flow has to be deliverable against
16 the paper. In other words, if someone in the
17 market buys gasoline a month from now in the paper
18 market, they have to know that in some way, there
19 is a physical barrel underneath that.

20 It is like the gold standard. Paper
21 money without a gold standard under it, is
22 worthless. A paper market without a physical flow
23 under it, is worthless.

24 As Dr. Verleger also pointed out that
25 once you have a physical flow in a sophisticated

1 market in a transparent market -- once you have
2 this physical flow, this connection to the forward
3 price, the difference between them becomes
4 meaningless, and he can speak for himself later on
5 this.

6 At the heart of the paper market is
7 still the physical delivery. What I am trying to
8 emphasize here, at this phase here, is that the
9 forward market and the future market we talked
10 about this morning is within California per say,
11 but stepping back from it. The strategic fuel
12 reserve, operating as a dynamic reserve as a
13 gasoline bank, not as a stagnant sitting
14 inventory, but as a rolling inventory, is similar
15 to what they call EFP's in the NYMEX. EFP means
16 exchange for physical. In other words, if you
17 hold a long position in the NYMEX in New York
18 Harbor for a contract, 10,000 barrels one contract
19 for next month, 1,000 barrels, whatever it is, you
20 can demand physical delivery by the power of
21 holding that long contract.

22 The reason you can do that is there are
23 means of getting physical supply into that market
24 through terminals, with supply coming from
25 Venezuela, from Rotterdam, from elsewhere in the

1 Atlantic Rim.

2 Liquidity requires a large number of
3 market players, diversity of participants, and a
4 physical trading hub. We are not saying if the
5 strategic fuel reserve is a panacea, it's going to
6 solve all problems, but it takes a step in the
7 direction of creating this situation.

8 A larger number of players could be
9 involved, there would be more diverse market
10 participants, and it would be a physical trading
11 hub. Now you would have to have fungible product
12 specification, we address that by saying only
13 CARBOB would be stored in the strategic fuel
14 reserve, the auxiliary tanks around it. The
15 private sector tanks could put alkylates or blend
16 stocks of any kind and position themselves to help
17 the market when it's needed and take on that risk.

18 Those stocks would at least be sitting
19 in California rather than sitting in Houston
20 waiting for something to happen in California, and
21 it would still be three weeks away or four weeks
22 away.

23 We are not yet to the point where we are
24 going to be drawing up standardized terms and the
25 kind of detail that David Hackett explained at the

1 beginning.

2 Our assignment has been at the
3 feasibility level, and so far, we really haven't
4 heard compelling arguments against this. We have
5 heard arguments against some model that we never
6 proposed in the first place, such as stagnant
7 reserve. We are against that too.

8 This idea seems to still have merit, so
9 I hope someone can shoot it down on the basis of
10 the way it has been proposed and not by a false
11 definition of what has been proposed.

12 What are the major obstacles to
13 liquidity in California that contributes to price
14 spikes? We know that California is not fungible,
15 but we also know that there are refiners elsewhere
16 who can make the specification if they could only
17 get it here on time.

18 There are no physical delivery hubs or
19 standardized terminals. We think that this
20 proposal might help that. There is not such a
21 diversity of market participation, we think this
22 would help that also. The chicken and the egg
23 conundrum, how do we get to where California maybe
24 arguably ought to be from where we are now, \$.50
25 about the rest of the country.

1 How do we get there? Is it the chicken
2 or the egg. I tell my Japanese friends, you have
3 to choose one of those, choose the egg, make a
4 decision, it's the egg, and then go from there.
5 We want to stimulate liquidity in this market. We
6 think that might be a good idea.

7 We are saying here that the forward
8 market, the future markets are not an end in
9 themselves. What they are in the context of this
10 dynamic gasoline reserve is this gasoline bank or
11 strategic reserve, these are means by which --
12 this is a means by which California becomes
13 connected to the global arbitrage of high quality
14 gasoline. It is a plug in, we're connected, it's
15 line fill, it is not a stagnant reserve. It's a
16 rollable.

17 One other argument has been, of
18 course -- I don't mean these arguments, this is
19 not a debate, it is really just exploration for
20 all of us, and I certainly yield to the more
21 rational point of view, if there is one.

22 This question of not enough long
23 positions, in other words, there is no one to buy
24 this gasoline downstream in the future in a
25 forward market.

1 You have to point out that California
2 itself is that natural long in relationship to
3 other supply points in the world, just as in the
4 Pacific Rim, just as New York Harbor is the
5 natural long to Venezuela and to Rotterdam and to
6 Finland. Anywhere -- as long as it is the highest
7 price in the region, after shipping costs have
8 been considered, that becomes the destination
9 market. California itself becomes a destination
10 market, after you bring bulk.

11 After you bring the cargo in, like we
12 have now, a spot market of \$.93, the spot market
13 is \$.93, the street is \$2.00. Once the cargo
14 comes in here and the market organizes around that
15 fact, that we are always competing with import
16 parity, then maybe what will happen in California
17 is the same thing as we saw happening in Japan and
18 Hawaii.

19 In both cases, the island refiners there
20 for years were the only -- had control of the
21 access, the terminals, and the means to go from
22 the outside markets in Singapore and Tawain in the
23 case of Japan, and in the case of Hawaii from
24 other supply sources, such as Australia and West
25 Coast Canada.

1 Once terminals were there and you could,
2 in fact, go into those markets and arbitrage the
3 refinery efficiencies so to speak in the region,
4 then street prices came down, and the competition
5 was more at the input parity level.

6 The real question here is, will this
7 proposal help California reach import parity
8 level, and that will be the debate, I suppose,
9 when it happens.

10 The cost benefit, I think, Thomas, do
11 you want to say a few words on that?

12 MR. GIESKES: Thank you, Gregg.

13 Cost benefit analysis was another point
14 of contention where some criticism was directed at
15 the way we have calculated both cost and benefits.

16 I think, in part, some of those may have
17 been due to misunderstandings or maybe we were not
18 sufficiently clear in the text of our report, or
19 maybe it was hidden somewhere in the 170 plus
20 pages.

21 What the cost for the SFR was based on,
22 in our proposal, was tender of storage contracts,
23 and we had assumed then prevailing commercial
24 prices of about \$.50 per barrel. That is still a
25 valid assumption. As a matter of fact, in the

1 stakeholder meetings that we had held right there
2 and then, there were current commercial storage
3 providers that said, yeah, we would be very much
4 interested in lending our barrels to the state or
5 building new tankage against those prices under a
6 long term contract. That was the basis for the
7 storage cost estimates.

8 We had assumed a debt service cost for
9 the initial fill. The initial fill is not a cash
10 expenditure. You can use the fill as a collateral
11 to secure debt and the cost of debt, that service
12 was the basis for the cost of the initial fill.

13 Administrative cost that was at the time
14 a rough order of magnitude, cost estimate of what
15 it would take to administer, and that brought
16 total annual cost up to \$25 M.

17 Now there was some criticism because as
18 we mentioned there as an opportunity that you
19 could lower that cost by applying to the federal
20 reserve as was done for the Northeast heating oil
21 reserve. The Northeast heating oil reserve was
22 partially funded by the EPCA, what does it stand
23 for again, the Energy and Policy and Conservation
24 Act provides for the creation of regional
25 reserves. Anything you store in the regional

1 reserve doesn't have to be kept in the federal
2 reserve. The idea is that you could do an
3 offsetting trade of crude oil for an equivalent
4 amount of barrels, and at least get a partial
5 offset for the cost of purchasing the initial
6 fill. That was not part of the base case
7 assumption, that was just an upside case.

8 Finally, the reserve, the auction fees
9 will generate some revenues, since we couldn't
10 quantify those as that time, we also did not take
11 any of that into account.

12 That is the cost for the SFR, so once
13 again, it did not assume in the base case any
14 offsets, although those offsets are contained in
15 current law and have been used in a precedent, and
16 it did not include any offsets from auction fees.

17 On the consumer benefit side, these were
18 derived in a separate analysis, Dr. Tony Finizza
19 will explain those in more detail. For a wide
20 range of scenarios and all we did in our analysis
21 was we looked at physical adequacy of the reserves
22 of a small reserve because after all, 2 million
23 barrels is only two days supply. You could
24 legitimately ask yourselves a question, is that
25 sufficient to deal with a major refinery upset, or

1 with something of the like we saw in 1999?

2 The controversial issues, the hundred
3 year storm and the federal offsets, those were the
4 things that we felt we had to deal with here today
5 in order to provide a rebuttal to some of the
6 critique.

7 The hundred year storm affect, one of
8 the things that we think may have led to some
9 confusion is that we used this graph in our
10 previous study to show the impacts of the '99
11 major refinery outages in terms of inventory
12 drawdown and production lost.

13 In this graph, what's shown? Let me go
14 through it again, this is the inventory drawdowns,
15 inventory was already low, there was a major loss
16 of production capacity from levels here to levels
17 much lower here. What happens is, you saw prices
18 go up during that period.

19 What we did in our analysis to establish
20 not the economic benefit, but the physical
21 adequacy of the 2 million barrel reserve, is say,
22 okay, what if you had at this rate of inventory
23 drawdown and at this rate of inventory drawdown?
24 What if you had 2 million barrels, how long would
25 that have lasted and what would it have done to

1 offset price increases?

2 What we found was that the 2 million
3 barrels would have been adequate to cover these
4 outages. That was purely from a physical adequacy
5 point of view is the 2 million barrels sufficient
6 to deal with the hundred year storm.

7 We thought, although from an economic
8 benefit analysis, it's not correct to derive your
9 benefits from the hundred year storm, it was
10 certainly the right thing to do to evaluate the
11 physical adequacy.

12 By the way, I think the hundred year
13 storm is not the correct words because if you
14 think of it, not much more than ten years back
15 there was a similar major refinery outage when
16 Mobil at the time, lost its Elco unit in an
17 explosion and there were fatalities. That
18 particular unit was shut down for a long time.

19 Major refinery upsets happen with a
20 certain frequency. We did not go into the extent
21 of providing full details, statistical analysis of
22 refinery outages and the probabilities of failure
23 of major units, but what we can say from personal
24 experience, it is more like the ten year winter
25 than the hundred year storm.

1 In any case, this sort of was an answer
2 to some of the points that were raised with
3 regards to proposed benefit analysis, and as I
4 said, Tony Finizza will got into much more detail,
5 but the actual benefits were calculated based on
6 statistical analysis of six years worth of data
7 and included a wide range of price analysis.

8 Starting price levels for regular gasoline,
9 we looked at, if you exclude the '99 disruptions,
10 what if your replenishing costs are not \$.10, it
11 was your base case, \$.05 to \$.15. All that did is
12 that we could come up with benefits at the low end
13 of the range of \$169 through the high end of the
14 range of \$600 M a year.

15 In any case, many many times the gross
16 cost of the reserve, which were predicted at \$25M,
17 so that is where I would like to leave that, and
18 then turn it over to Dave to summarize it.

19 MR. HACKETT: Hey Drew, I'm turning into
20 the home stretch here on the summary page. Before
21 I get started, do you have anything else you want
22 to say?

23 MR. LAUGHLIN: No, I don't want to push
24 it any longer.

25 MR. HACKETT: Good. All right. There

1 are a number of conclusions that we came up with
2 last year, we haven't changed. It is an import
3 market, and imports can continue to grow. The
4 capacity to bring in those imports are
5 constrained. There are no two ways about it.

6 Industry inventories are low, I think
7 Thomas looked at that stuff six ways from Sunday,
8 and basically what we think is that they are too
9 low, and they are too low because there is just
10 not enough capacity to hold inventory given the
11 fact that refinery production isn't keeping up
12 with the demand.

13 Demand is highly inelastic, anytime
14 there is a stumble and prices are going to do
15 unfortunate things, we just saw that in March, and
16 we think that the concept of the gasoline bank
17 will generate savings for consumers.

18 We did learn some new things, we can see
19 a turn around in the trend on storage, we talked
20 about that extensively. We have identified marine
21 infrastructure bottlenecks, I think we were sort
22 of aware of that, but we got a better beat on
23 that. One thing that we do want to note is that
24 the refinery reliability of 2002 is certainly
25 quite good, although first quarter 2003 was not.

1 Okay, recommendations. Go to the next
2 step on the SFR, evaluate the options, you know,
3 look at the oversight functions, and issue tenders
4 and confirm cost. When I saw that, I want to make
5 sure that, Jim, you understand that we want you to
6 select the best company to do that. That doesn't
7 have to be us. As taxpayers, we want to make sure
8 that California gets their monies worth, and
9 whoever you choose to do that, we'll support.

10 PRESIDING MEMBER BOYD: John and I were
11 thinking of quitting shortly and going into
12 business again.

13 (Laughter.)

14 MR. HACKETT: Don't go work for the CEC
15 because from time to time it is remarkable how
16 hard it is to get paid.

17 (Laughter.)

18 MR. HACKETT: Oh, yeah, on the record.
19 There are a number of projects, but all this
20 infrastructure stuff, I think you all need to
21 support. I'm not exactly sure how you do that,
22 but some of it is locally driven and the like, but
23 you need to support infrastructure.

24 Finally, there's the issue of the market
25 transparency. We touched on this a bit, certainly

1 with marine stuff there was specifics, and we see
2 that state land data, but more than that, I think
3 that the data monitoring collection reporting
4 needs to be improved.

5 More importantly, the analysis. If you
6 are taking in all these numbers, what do they
7 mean, and I know that you are working on that, and
8 I want to support your continued improvement in
9 that area, and then continually look at these
10 price spikes and the route causes of them.

11 Those are our recommendations. We are
12 going to shift now to Dr. Tony Finizza, who's
13 going to conclude the presentation or will have
14 the concluding presentation.

15 DR. FINIZZA: My name is Tony finizza.
16 I'm an economist, and I needed an engineer to turn
17 this on as usual.

18 After the first draft of the Stillwater
19 report last year, I was asked by the staff of the
20 Commission to do an analysis of the proposal. I
21 presented the report in written form last July,
22 and since then, what I've done is updated some of
23 the disruption data and added a little extra data
24 on increased volatility or decreased volatility I
25 should say. That is what I will present today.

1 I'm going to skip a number of slides.
2 Don't think I'm hiding anything from you, I think
3 in the interest of time, it won't alter my
4 message.

5 What I am showing here is a measure of
6 historical volatility for prices, spot gasoline prices.

7 MR. MATTHEWS: It would help if you
8 would tell them what slide you are on.

9 DR. FINIZZA: Okay, I'm sorry. It is
10 slide number five of my package. I've defined
11 volatility here as the wild change of, log price
12 changes, put on a per month average basis on an
13 annual average.

14 This would mean that if you look at the
15 right hand column here, the volatility of
16 reformulated gasoline in Los Angeles in the year
17 2001 has roughly a 14 percent average volatility
18 and price for a given month.

19 What this table will show indicates that
20 on average, Los Angeles gasoline, and I chose that
21 as a symptom of California prices, would show
22 higher volatility than other reformulated gasoline
23 markets. In fact, in the year 2002, not
24 surprisingly, I guess, we had a fairly good year
25 here. We were on par with the other three

1 markets.

2 The next slide six, is done on the basis
3 of retail gasoline prices and roughly the same
4 message, the holes there, that gasoline prices in
5 California are more volatile than the other
6 market. That volatility has, so to speak,
7 improved since the bad hundred year storm year of
8 1999. I remind you that this data goes to the end
9 of 2002.

10 For those who like pictures, that is a
11 picture of spot price of gasoline in Los Angeles.
12 You will notice the spikes that have occurred in
13 post 2001 are less spikey than in the past.

14 This one here on slide nine shows
15 California spot prices minus U.S. Gulf Coast
16 prices, that is, I've tried to take out the fact
17 of crude movement. Again, since that vertical
18 line, the 2002 period has shown less volatility up
19 until the last three months.

20 On the next slide number ten, I have
21 graphed retail prices in California as compared to
22 retail prices for gasoline in the other parts of
23 the U.S. subtracting out California.
24 Historically, that averages roughly \$.16 per
25 gallon. That recent retail price spike, that is

1 the difference between California prices and all
2 other retail prices in the country is on par with
3 the retail prices we saw during the 1999 bad
4 season.

5 My conclusions on price volatility would
6 be that prices are more volatile here, volatility
7 increased in 2001 then decreased It's increase
8 relative to the Gulf Coast and New York, is
9 generally higher than New York, and the spot
10 prices that we have had in the last couple of
11 years are not as dramatic on a wholesale basis as
12 we have had in the past, but the retail has been
13 as dramatic.

14 In terms of my analysis, the first step
15 was to try to understand something about refinery
16 disruptions. I had the good fortune to have
17 substantial data help from the Department of
18 Energy for data through March of 2001. I updated
19 that data to the present, at least to the end of
20 March of 2003, and that is what I will show you
21 here.

22 I am not privy to company data, so this
23 has to stand on the basis of what you can learn
24 without being inside a company. The use of OPIS
25 weekly reports is the main source. They do often

1 report rumors, those are not included. They do
2 not include -- these data do not include planned
3 maintenance.

4 If there is a planned turn around that
5 is not considered a disruption. If a planned turn
6 around turns out to be lengthier than planned or
7 they can't get whatever they were turning around
8 turned around, it becomes a disruption.

9 I placed this graph and updated the one
10 on the website report to dictate the occurrence of
11 refinery disruptions. Each vertical bar indicates
12 the thousands of barrels a day that would be, in a
13 sense, disrupted. It can be because of one
14 refinery out, two refineries out, three refineries
15 out, or four. There are two occasions in this
16 eight year period that four refineries were out at
17 the same moment.

18 I put blue versus red so you can get a
19 feel for what happened since the earlier report I
20 wrote. These indicate the disruptions that
21 occurred in 2001 and 2002, and 2002 was a fairly
22 good year. I think we were all kind of resting on
23 our laurels, and I suspect a lot of the
24 disinterest in the earlier report may have been
25 the fact that we were in a nice benign year.

1 Of course, these things don't always
2 continue, so we now have four disruptions in the
3 first quarter of 2003, and that of course is over,
4 and we are in the second quarter. Hopefully, we
5 will end up with some other benign pattern.

6 Historically, not including the red
7 numbers, the average size of a disruption was
8 21,000 barrels a day, lasted for almost three
9 weeks, the chance of a refinery being out in a
10 given week was .017. Those are going to be
11 important because I'm going to use that in my
12 expectation of what savings we might get if we
13 could mitigate these price spikes or at least part
14 of the price spikes.

15 I'm not going to -- I'm on page 15 for
16 anyone who is following on the web, I have a
17 number of findings on the disruptions, and I'm
18 going to go over them very quickly. They roughly
19 are 20,000 barrels a day, average three weeks,
20 some are very long, much longer than that. The
21 size and duration I've not correlated directly.

22 The affective disruption lasts six to
23 eight weeks in terms of retail prices. You can
24 have more than one refinery disruption at a time.
25 They have an immediate impact on spot prices. Not

1 all of them will lead to spot price increases,
2 sometimes there's a lot of inventory around,
3 usually in the winter months.

4 If there is a planned turn around,
5 prices aren't affected by spikes because refiners
6 have planned for that and built inventories in
7 advance of that.

8 A refinery in Southern California
9 affects prices in the North and vice versa. When
10 you have a price spike here, you usually don't see
11 it going outside of our island.

12 Refiners respond very quickly to a
13 disruption, but if they are bringing in product,
14 the distance is, of course, a barrier.

15 Let me tell you what I did here to count
16 the benefits of an SFR. I decided that the
17 important thing was to use weekly data and that
18 precluded use of any real substantial models. I
19 wasn't able to build one of an econometric type.
20 I decided to do the following.

21 I examined characteristics of refiners,
22 and I said let me simulate over time under various
23 assumptions about how frequent a refinery
24 disruption happens, the distribution of how
25 likely, what size of refineries to be disruptive,

1 and how long it might be disruptive, examine using
2 some empirical estimates of price elasticities,
3 what would be the price impact of clearing the
4 market if you had a SFR versus one where you did
5 not have a SFR, and then examine the change in all
6 these three criteria.

7 I report all three in the paper, but I'm
8 only going to speak about the change in the
9 consumer gasoline bill today, that is the benefit
10 that would be if you could mitigate or truncate a
11 big spike, how much would the consumer's gasoline
12 after that truncation compared to before the
13 truncation.

14 I also calculated the change in consumer
15 surplus which is roughly the same order as the
16 consumer gasoline bill and the change in total
17 welfare.

18 Most people seem to be most concerned
19 about this metric change in consumer bills, all 30
20 million of us.

21 I stylized three price spikes, and if a
22 price spike did not, would not reach above a point
23 that is pre-priced plus some kind of replenish
24 import parity number like this one or this one, I
25 did not take credit for those, only those that

1 were of large, and I only took credit for the red
2 part.

3 I'm now on page 19 turning to 20. I
4 estimated the demand of elasticities, I think this
5 was a very important part. I did an exhausting
6 and an exhaustive study of this. I forced myself
7 to read all of these papers, and I found out a
8 number of them are in error, and that people who
9 read them don't always pick them up.

10 I was proud of the fact that I caught
11 those errors, I thought that my econometrics
12 knowledge disappeared when I turned 40, and maybe
13 it did, but I made the delusion.

14 I decided that -- let's see, I decided
15 that I would separate elasticities into the man
16 side effective and the supply side effect, and my
17 conclusion was that the combined -- the best
18 estimate of the combined effect was $-.15$. I
19 decided not to just base all of my analysis on a
20 point estimate. I was going to use sensitivities.

21 I was comforted by the fact that for
22 four pure unadulterated disruptions in which there
23 were no other refinery disruptions around that I
24 could empirically get an estimate that was on
25 average about $-.15$, so I felt comfortable about

1 that.

2 I did the following, I would estimate
3 assuming the same kind of probability
4 distributions that we saw over the five year
5 period of refineries. I would get the
6 estimated -- I would trace out price spikes. I
7 would check to see if the price spike was large
8 enough to truncate. If it wasn't, I ignored it.
9 If it was large enough, depending on replenishment
10 cost, I took value for that peak.

11 I did under base assumptions saying that
12 we had a historical disruption frequency size and
13 duration, that the price of gasoline was \$1.50,
14 which was about what it was for 2002, it turns
15 out. It took \$.10 to replenish the SFR, once
16 drawn from it, and I also, in all of my cases,
17 assumed that there's not going to be a price rise
18 in the case of high inventories, and basically
19 stylized to be periods of contango.

20 If a refinery occurred -- I traced out
21 all 52 weeks of the year. If a refinery was
22 disruptive in the winter, which is defined by
23 refinery people as November through February, I
24 assumed it was no disruption, that there was
25 enough inventories around to cover it.

1 I only calculated to credit for
2 refineries that were large -- excuse me,
3 disruptions that were large and that occurred from
4 March through September.

5 Under those assumptions and with this
6 best guess of the elasticity, I calculated on an
7 average annual basis, you would -- if you could do
8 this, you could in other words get the oil out of
9 the SFR, there's no crowding out, that there was
10 an auction that was non discriminatory, etc., you
11 could count on saving \$400 M.

12 If you said, well, forget the hundred
13 year war guy, so if you said the disruptions would
14 have the same probabilities of every year except
15 1999, the cost would more than half. You would be
16 at \$169. These assumptions are very important.

17 If you assume the refineries are not going to
18 be disruptive as they were in the past, of course,
19 this SFR is not going to be as valuable obviously,
20 but that is the lowest number I got for this price
21 elasticity.

22 If you think the price of elasticity --
23 if you think we are in a position of being more
24 elastic in a sense that we can find alternatives
25 and stop our buying behavior, of course, it's not

1 as valuable either.

2 There is my range. When people ask me
3 what do you say for truncating spikes if you could
4 do it, \$150 to \$400 M sounds like a reasonable
5 number.

6 Now, also, if you had more inventory in
7 the system and less volatility, I would assume you
8 would also have lower average prices, so with a
9 version of a model developed by Pendike, I
10 calculated that we would have something like \$150
11 to \$250 M lower consumer gasoline prices, gasoline
12 bill, and that number roughly is equivalent to the
13 two points that are cited in the Stillwater report
14 that said, with a SFR you get fewer chronic
15 shortages and smaller spikes.

16 I would add these up and somewhere
17 between \$300 M and \$600 M. Jim, before you get
18 excited about this, this is 1 to 3 percent of the
19 consumer gasoline bill. It may seem a lot to you,
20 but it doesn't seem a lot to the whole state.

21 I was quite impressed with the new
22 things that appear on the California Energy
23 Commission website and in the governor's report.
24 There is one graphic that shows the components of
25 a price of gasoline broken into taxes and margins

1 and crude costs. I think it is a very affective
2 way of illustrating to the consumer.

3 Actually, I think a better way is doing
4 it this way. Now, this is, I think, understated,
5 I don't know if I used enough volume here. The
6 total consumer cost of gasoline in California is
7 at least \$22 billion a year. You get some of it
8 back, you know, we've got state excise tax is
9 probably \$2.6 billion, \$.18 a gallon, \$1.6 in
10 state sales tax, some of it goes to the counties,
11 federal excise tax of \$2.7, crude cost was roughly
12 \$8 billion, refiners cost and margin \$6 billion,
13 \$1 billion for dealer cost and margin.

14 Backing up, you decide for yourself if
15 whether it is worth reducing a large bill by 1 to
16 3 percent, but that is certainly, in dollar terms,
17 well above in my opinion the cost of doing a SFR.

18 I also wanted to look at some rough and
19 ready dirty analysis, so to speak. This is a
20 plot, this is a little different presentation of
21 gasoline pricing that you have probably seen.
22 This is, of course, what I used earlier. The
23 price of gasoline in California, now, minus the
24 gasoline in the rest of the country, and it goes
25 around \$.16, \$.17 a gallon, and this only goes

1 back to the year 2002. I am now on page 27.

2 Since the disruption, and the disruption
3 here is characterized as a turn around that didn't
4 turn around right, we've had West Coast,
5 California gasoline prices, in fact, at one point
6 reached \$.50 a gallon higher than all the other
7 reformulated gasoline prices on average in the
8 country.

9 This near obscene graph shows that area
10 under there represents \$715 M not per year, but
11 accumulative over that six week period. I also
12 noticed that in the recent phenomenon, we all know
13 whenever there's a disruption or a spot price
14 increase, it gets transmitted to the retail price
15 very quickly, and then on the way down, the spot
16 price, and I'm on page 28, the spot price falls
17 fairly dramatically.

18 Retail prices hang on for reasons that a
19 lot of us like to think we know about. None of us
20 can prove, we all have our favorite theories, but
21 it seemed like this time it is lagging a lot
22 faster, it is lagging more than it did in the
23 past. At least from my earlier calculations which
24 also appeared in my July 4, 2002 report.

25 What happened in the first quarter is

1 anyone's real guess, this is what I think you can
2 surmise from the data, and I came to this
3 conclusion, and then I noticed and was told that
4 this appears in the governor's report, which you
5 produced, so I thought I would steal it since we
6 are not getting paid a lot, we might as well use
7 what we can.

8 (Laughter.)

9 I don't know, someone who knows what the
10 refinery is and could probably follow this
11 through, but going into the first quarter of this
12 year, this refinery built inventories knowing that
13 it was going through a maintenance period. That
14 is a typical refinery behaving, and it makes a lot
15 of sense.

16 MR. SCHREMP: Hey Tony, this is Gordon.
17 That is basically all the refineries combined.

18 DR. FINIZZA: Yes, I know.

19 MR. SCHREMP: Not just one.

20 DR. FINIZZA: I know this is all
21 refineries, but yes, this is the whole market. As
22 many of the refineries completed their
23 maintenance, this was worked off of course. One
24 refinery in particular ran a little bit longer,
25 ordered or brought in supply, I assume, right out

1 here with a lag that is, of course, couldn't allow
2 them to replenish their inventories faster. That
3 manifests itself right in that spike that I showed
4 you earlier.

5 My next look was at a work also
6 commissioned by the Energy Commission. I did not
7 do this, so I feel comfortable reporting on it.
8 Actually, this was from Andy Ford's work. I won't
9 dwell on it because I didn't do it. I won't dwell
10 on it too much.

11 He also traced out some cost savings,
12 and his dynamic model shows this red line is a
13 price spike, a stylized price spike in the absence
14 of a SFR with a disruption causing it. This
15 pattern here is his spot price after he tries to
16 mitigate it.

17 The interesting thing about his work is
18 that he actually notices that when you replenish,
19 which is an expectation, when you replenish
20 through the SFR, you actually increase the supply
21 of gasoline, so you actually over shoot.

22 His conclusion, and I again can't give
23 you all the details, but I did learn this from his
24 paper, that he finds large benefits from the
25 prevention of price spikes, but he does find

1 negative benefits from short small outages. If
2 you don't know it's going to be a big spike, and
3 you act on it, you actually do not get the benefit
4 of it, and you have added all that cost.

5 I did one other thing, I call this the
6 "Optimal Size of the SFR". I think that is a
7 misnomer. This should be -- if you had to guess
8 how much more inventory you would like to see in
9 the precautionary inventory categories to prevent
10 spikes, in other words, have enough inventory on
11 hand to avert some of these large spikes. I did
12 the analysis to see what would be the size of an
13 incremental precautionary inventory to avoid
14 having a disruption of large spikes with 90
15 percent confidence, about a million barrels. A
16 little less than one if you wanted to avoid the
17 expected to make sure you didn't have an expected
18 high spike anywhere in the process.

19 My conclusion would be with all this
20 that the potential economic benefit avoiding the
21 large spikes or truncating the large spikes and
22 also taking credit for some of the lower prices,
23 that you would have to be somewhere in the \$250 to
24 \$700 M range per year, which turns out as I said
25 earlier to be somewhere between 1 and 3 percent of

1 the total consumer gasoline bill.

2 I think that if you had to size the SFR,
3 you would probably be able to get by with a
4 smaller amount subject to the amount you have to
5 add back in to compensate for the crowding out
6 that will probably be some of that I am sure that
7 precautionary and speculative levels of
8 inventories.

9 That is my report. Thank you.

10 PRESIDING MEMBER BOYD: Thank you,
11 gentlemen. Will the staff lock the door now and
12 hand out the test.

13 (Laughter.)

14 All right. the floor is open, comments
15 and questions, any and all, or do you have some
16 concluding remarks, Dave?

17 MR. HACKETT: Jim, I do not, I stand
18 here with a target on.

19 PRESIDING MEMBER BOYD: Okay.

20 MR. LANZA: I'm Robert Lanza from ICF
21 Consulting. I'd like to go back to the previous
22 presentation concerning some of the controversial
23 issues that you identified. One of the issues
24 that you identified was the need for the SFR to
25 have deep water access.

1 In the prior presentation this morning,
2 we had discussed that deep water access is a
3 scarce commodity, and I had a two part question
4 concerning the need for deep water access with
5 respect to the facility. One of which is what are
6 the implications of deep water access being a
7 scarce commodity with respect to the Port of Los
8 Angeles, for example, discussing whether to
9 eliminate storage capacity with respect to adding
10 capacity for containers, cars, etc.

11 The other part of the question, what are
12 the implications with respect to the flexibility
13 in siting such facility in terms of the number of
14 areas where you could potentially site this
15 facility in practice.

16 MR. HACKETT: Let me take the second
17 one first because I think it is a bit easier. The
18 intention here -- our thought was that we go out
19 with a tender to the logistic service providers.
20 We would go to ST Services, Kinder Morgan, Vopak,
21 Shell Pipeline, Arco Terminal and Services Corp.
22 and the other firms that do this. You know, that
23 run tanks and pipelines and understand the
24 business.

25 When you examine their facilities, I

1 think that many of them have spare land. There is
2 physically enough dirt to put tanks on in most of
3 their locations.

4 As far as the deep water access, what we
5 observed was that several terminals, especially in
6 LA, are constrained by their ability to move the
7 product away from the dock. Ships can come in,
8 but they can't complete discharge in a quick
9 fashion and therefore, there's a fair amount of
10 queuing that goes on. This is especially true as
11 reported to us at the major independent dock.

12 I think that what we saw with ports was
13 that they would support docks, but they don't
14 support tanks immediately on the shore, and the
15 way those are good is when the ship can come in,
16 immediately discharge into that storage, and leave
17 and then the pipeline could move it inland, as
18 opposed to having the ship pushing it inland
19 itself.

20 There are some efficiencies associated
21 with that depending on the pipeline capacity. I
22 think the docks kind of -- pardon me, the ports
23 see good economics in operating docks because
24 frankly, they are a sure side foot print is pretty
25 small. If you look at Berth 121 in LA when there

1 isn't a tanker there, it's hard to tell if there
2 is some kind of facility because really it's an
3 acre or so, as opposed to ones that have tank
4 farms sitting on them.

5 I think the ports would be supportive of
6 providing dock capacity as long as there doesn't
7 have to be a tank sitting next to it.

8 MR. LANZA: Now, to follow up, what is
9 the relationship between the feasibility of
10 existing storage facilities expanding their
11 tankage with respect to the land that they have
12 versus getting a facility further inland where the
13 ship comes and pipelines the product into a more
14 inland storage facility.

15 MR. HACKETT: I think maybe I wasn't
16 clear with my first answer. The land that these
17 companies have, the folks down in LA for the
18 moment, is primarily inland. There really isn't
19 any extra space in the ports for additional
20 capacity. If you look hard, you can squeeze
21 something in, but in general, the kind of capacity
22 we are talking about, which is on the order, we
23 said 5 million barrels, but you know, millions of
24 barrels of capacity, you can't do at the water.

25 MR. LANZA: You would potentially be

1 doing this at a number of different locations
2 rather than have specific facility dedicated to
3 this in one location?

4 MR. HACKETT: We would probably discover
5 in the tender process what the logistic service
6 providers would be willing to do, and so I think
7 we would probably look to the industry to figure
8 out and come back to us with their recommendations
9 on how they would do the dock, do the pipelines,
10 do the tankage.

11 MR. LANZA: Thank you.

12 MR. LAUGHLIN: Dave, can I answer
13 further, that it is the economy, the scale of
14 building a facility in the North, possibly one in
15 the South and one in the North. The problem with
16 building single tanks that the storage companies
17 are coming up against right now, is that once one
18 or two more tanks might constrain their lines, so
19 they have to build another line. They can't
20 justify that with one or two tanks, but they build
21 the line, and then they have to build bigger
22 pumps. They can't justify that with one or two
23 tanks, they need a bigger system.

24 What the SFR could do is prompt a tender
25 or one of these other inland facilities to be able

1 to justify the infrastructure they need to have to
2 do the construction of additional lines, pumps,
3 and docks, you know, to move the product
4 inland. I think you said this was never
5 really thought to be a stand alone grass roots
6 strategic reserve. It's really always contemplated
7 to be a reserve within an existing facility some
8 where in the state.

9 MR. LANZA: Thank you.

10 MR. GIESKES: Yes, thank you. Bob, I
11 would like to add one additional element to this.
12 When we look at the available infrastructure and
13 the potential for additions, for instance, there
14 are two really good berths in the Port of LA, 192
15 and 193, which are currently idle, which are not
16 utilized which could have 51 feet of draft.

17 They are hung up in this political
18 indecision process of land policy, etc. We
19 thought if the State of California came out and
20 was the prime mover behind a strategic project,
21 that might just be the sort of push that makes
22 these projects come to shop. The land is there,
23 the port access is there, pipeline can be built,
24 but for some reason, when we looked at it, nothing
25 was happening.

1 MR. KAVALEC: Chris Kavalec from the CEC.
2 I want to go back to this idea of crowding out for
3 a minute, and I have a comment and a question for
4 Thomas.

5 I'm looking at this, going back to the
6 slide number 21 that shows the inventories versus
7 prices.

8 MR. GIESKES: In the marine
9 infrastructure presentation or in the --

10 MR. KAVALEC: SFR, yeah.

11 MR. GIESKES: There we go.

12 MR. KAVALEC: This is the comment. To
13 me this doesn't seem to show really anything
14 because it doesn't factor in all the other
15 variables that go into the inventory decision,
16 does it?

17 MR. GIESKES: No, and you are quite
18 right. This is more an illustrative slide than a
19 regular statistical analysis. A statistical
20 analysis was done in great deal around individual
21 price spikes to see what inventory behavior was.

22 One of the problems that we had was the
23 (indiscernible) of the inventory data and price
24 data. Ideally, what you would like to see is
25 daily data, but those were not available. The EIA

1 data, which had the total refinery inventories are
2 monthly which doesn't allow you to do any analysis
3 around these things at all.

4 What we had was the refinery data
5 including the CEC data, including the Bay Area
6 bulk terminals. I think the one indisputable
7 facts is the narrow band in which these volumes
8 move, and I would almost like to turn the burden
9 of evidence around. I mean, what you would really
10 like to see, if you believe that there are
11 substantial volumes of discretionary inventory
12 that I used to play into price spikes, is an
13 inventory pattern that sees a build up of
14 inventory at times when prices are low and then a
15 sell off when prices are high.

16 That clearly is not the case. If you
17 do, indeed, do a regular slot like we did around
18 some of the price spikes, you see that there is a
19 completely inverse relationship between inventory
20 and prices.

21 Prices go up when inventories are low,
22 and there is very little -- let's put it the other
23 way, there is very little evidence of any
24 significant inventory play, where people lay in
25 inventories in anticipation of a price increase

1 and then sell it off when prices were high.

2 Those plays, when they are made, are
3 largely made by the trading community and the
4 trading community includes certain refiners that
5 have active trading groups within their corporate
6 structure. We estimated that within the 4 million
7 barrel of total range that you have, that would be
8 about a half million dollar effective range. That
9 means there was about a million barrels of storage
10 capacity allocated to that type of behavior. That
11 seems reasonable.

12 I think, I don't know what -- Dr.
13 Williams this morning had a similar number on
14 which I don't know what he uses, the basis of
15 this, but I agree with you, this graph doesn't
16 quite show it, but there is a lot more that we
17 could have gone into, a half hour at least
18 analysis on inventory behavior around individual
19 price spikes.

20 MR. KVALEC: Okay, my question is then,
21 let's assume that discretionary inventories are
22 insignificant. Given that all our econ text books
23 tell us that the more volatile prices are, the
24 higher are going to be discretionary inventories.
25 How would one explain why refiners keep such low

1 levels of discretionary inventories?

2 MR. HACKETT: You know, that's a really
3 good question, and I think our conclusion is that
4 they are keeping the gasoline tanks about as full
5 as they can.

6 The behavior here is that it runs right
7 at about half full, 40 to 60 percent. You see
8 that there are times of the year when inventories
9 are built. You saw Tony's graph on inventories
10 for the February/March period, looking at this
11 last price spike and how inventory performed there.

12 The inventory peaked at 14.3 million.
13 That's the CEC California inventory, which is
14 frankly exactly what we expected them to do. They
15 filled up the tank ahead of the late winter early
16 spring turn around season and ahead of the start
17 of ECARB, making CARBOB.

18 We review the refiners behavior as
19 completely consistent in that they want to protect
20 against turn around issues, and they wanted as
21 much coverage as they could get ahead of blending
22 this new gasoline because they knew they were
23 going to have -- I think they suspected they would
24 have learning curve problems with that.

25 What was interesting to me, at any rate,

1 is that as a practical matter, and I hadn't been
2 focusing on California in terms of watching PADD V
3 inventories, the bottom of the inventories were 28
4 million barrels.

5 It started about 33 1/2 and at the
6 bottom at 28. The 28 is the low side of average
7 on inventory, and so to some degree, either we
8 think that sort of represents the relative
9 difficulty in blending CARBOB.

10 Folks have a lot of components in their
11 tanks that get counted as gasoline inventory, but
12 they couldn't blend into CARBOB even though the
13 price has got to above 55.

14 MR. HAGGQUIST: Chris, what strikes my
15 mind in answering that question is, I've seen in
16 the past in other markets, I'm not saying this is
17 actually the way this works here in California,
18 that is refiners in a circumscribe market will
19 remain balanced to short. You don't want to be
20 long, you want to be balanced to short. It's good
21 to be short to your downstream needs.

22 If you are 5 percent short or 10 percent
23 short, the 10 percent that you buy in the market
24 pushes up the 90 percent that you make. It's a
25 strategy to stay. You don't want to be long, you

1 want to be short. Oftentimes, that can be an
2 overriding situation, it dwarfs everything else.

3 MR. GIESKES: I would like to make one
4 additional remark as well, Chris. As I think of
5 what has been happening in refinery inventories,
6 and this is nation wide, a number of refineries in
7 the state has been halved since the early '80's
8 when there were 300, there are about 150 today.

9 What happened in the case of refinery
10 closures, in some instances, the tankage remains.
11 Usually what happens is the refinery gets simply
12 closed up. What we have seen in California as
13 well as a number of these small refineries were
14 closed down, the overall production level of
15 California gasoline has increased over the years.
16 The number of tanks in actual operation has
17 decreased.

18 If you look at the states as a whole,
19 there was about on average in the '80's about 200
20 million barrels of gasoline on hand, finished
21 product gasoline. Today that number is down to
22 about 150, while the amount has gone up
23 considerably. Now that 150, of course, 35 is
24 pipeline hold up, if you look at what happened in
25 the United States as a whole, and what is

1 happening in California is that gasoline
2 production has crept up, but refinery storage has
3 actually come down.

4 It is very difficult for a refinery to
5 justify spending capital on tankage. I mean, I
6 have been in a position where you try to justify
7 tankage and you are shot down in flames, they say
8 you want money for what, and if inventory is
9 holding its capital and it's just hard for
10 refineries to build and hold inventory despite the
11 obvious argument that you might want to play into
12 trading opportunities.

13 MR. COVI: I have a question.

14 PRESIDING MEMBER BOYD: All right.

15 MR. COVI: Brian Covi, CEC, for Tony.

16 Just some clarification on your calculation of
17 historical volatility. You are using monthly
18 data?

19 MR. FINIZZA: I am using daily data.

20 MR. COVI: Daily data?

21 MR. FINIZZA: I wasn't clear, I'm sorry
22 Brian. I used daily data to the daily change in
23 price log, the percentage change in price log of
24 the ratio. I averaged it for thirty days, and
25 then so there are a lot of those periods in the

1 year and then upscaled for an annual percentage.

2 It is kind of traditional statistical
3 way of showing historical --

4 MR. COVI: It's not something different
5 from the standard deviation or --

6 MR. FINIZZA: It's akin to that, but --
7 yeah, it is very similar to that.

8 MR. COVI: For the sake of simplicity
9 calling it a standard deviation, in the second
10 slide where you have USRG down the middle there,
11 is that an average of regional standard deviations
12 or is the state --

13 MR. FINIZZA: It's the average, yes.

14 MR. COVI: Thank you.

15 MR. METZ: Daryl Metz of the CEC. I had
16 a follow up on the same issue, so my question is
17 related to did you have the opportunity to compare
18 California to any other regions within not the
19 U.S. as a whole, but California to let's say the
20 midwestern volatility or the Southeastern U.S.
21 volatility?

22 MR. FINIZZA: Actually, I compared it in
23 the report to the Midwest. I didn't update it, I
24 probably should have. I think there were periods
25 of time when the Midwest was as volatile as the

1 California, but I think that was the only region
2 that had that feature.

3 MR. METZ: Why was the Midwest as
4 volatile as California?

5 MR. FINIZZA: I think when the Midwest
6 spiked, they had a number of refinery outages in
7 the Midwest, 199 -- I guess it was 2001.

8 MR. GIESKES: April of 2001.

9 MR. LAUGHLIN: There's some similarities
10 between California and the Midwest with the
11 inability to get product there quickly, and so
12 only a limited amount of pipeline to a limited
13 amount of refiners. If one or two goes down, the
14 pipeline can't supply it, and at that particular
15 time, one of the refineries went down and then the
16 pipeline went down too.

17 MR. HACKETT: Drew, what would you --
18 got any comments about the quality of the
19 gasoline, the --

20 MR. LAUGHLIN: Yeah, that was their
21 first year, it was a major shift for them on a
22 quality change on (indiscernible) and that was a
23 large learning curve problem, but I think
24 California is still going through right now on
25 learning to make summer CARBOB, they were learning

1 to make summer ethanol RFG. It was quite
2 difficult for the first few months.

3 MR. HAGGQUIST: This is Gregg Haggquist
4 here again. Just one other comment. You have to
5 keep in mind that volatility in its own sense
6 doesn't tell you the whole story. If you have
7 double the volatility at \$1.00 a gallon average
8 compared to flush of volatility at \$2.00 a gallon
9 average, you pick the \$1.00 with the high
10 volatility. That is just a point to consider.
11 We are trading in a range higher than the rest of
12 the country irrespect of the volatility.

13 PRESIDING MEMBER BOYD: Other questions,
14 comments.

15 MR. MATTHEWS: Yeah I have --

16 PRESIDING MEMBER BOYD: Keep trolling,
17 keep getting one out there.

18 MR. MATTHEWS: Sorry. I'm just thinking
19 about this, I am relatively new to this area.

20 PRESIDING MEMBER BOYD: Don't let him
21 fool you.

22 MR. MATTHEWS: Sort of being new, you
23 sort of walk into a situation and sort of think
24 that things have been the way that they are for
25 some period of time and have not been totally

1 focused on the fact that we've been importing only
2 since 1999, and I'm wondering if the market is
3 just now beginning to change to reflect that
4 circumstance.

5 I'm worried about the crowding out issue
6 and wondering if the crowding out issue is a non-
7 issue as long as the amount of discretionary
8 storage doesn't change, but if you are seeing more
9 storage being built this year, if let's say three
10 years from now, it would be quite a bit more.

11 We may not be crowding out existing
12 discretionary inventories, we may be crowding out
13 future discretionary inventories.

14 MR. HACKETT: Sort of the first step in
15 this whole logic process is I think it comes back
16 to where Chris was going is why don't they hold --
17 I think I heard Chris say why don't they hold more
18 inventory? My answer is that I think it's because
19 they hold as much as they can. They are short on
20 capacity. Given that we believe that there's very
21 little discretionary -- from time to time maybe
22 you can see some discretionary inventory, but in
23 general, it is not there.

24 I think some of that probably is a
25 reflection, you might see it in Dr. Williams

1 forward market stuff where the amount of contango
2 is pretty small. This market is normally
3 backward, ain't it, which I think helps to
4 indicate that it tends to be fairly tight.

5 If you've got a barrel that you want to
6 sell today because the market says it will be
7 lower tomorrow, and then you get to tomorrow, and
8 it is still tight.

9 I think the issue here is an increase in
10 capacity is required to get to the point where the
11 discretionary inventory debate gets to be
12 relevant.

13 MR. LAUGHLIN: Dave, I want to say one
14 thing, too, the big difference between the West
15 Coast and the Gulf and the East Coast in
16 inventory, especially on strategic level, the West
17 Coast seems to be available barely get by with the
18 inventory they have. As you said, it is almost
19 all operational.

20 On the Gulf Coast and on the East Coast,
21 there's tremendous amounts of strategic inventory
22 where refiners, blenders, traders, whatever you
23 might want would have the ability to come in and
24 take substantial storage, and even if not here
25 then down in Stasia or Aruba or Bahamas or in the

1 hemisphere, and take substantial storage at
2 reasonable prices and put in huge volumes if they
3 choose to of summer fill, or summer inventories or
4 blend stocks.

5 That doesn't exist in California. That
6 ability to put those barrels in storage and sit on
7 them, you don't have the storage. That really is
8 the difference is the strategic inventory storage
9 that exists in most of the United States, and when
10 we switch from winter to summer, there are lots of
11 blend stocks and there is considerable amounts of
12 summer grade gasoline pre-made and pre-stored
13 waiting in anticipating a price spike.

14 In fact, in a lot of ways, it takes what
15 they made in the winter and hedge it in the out
16 months with significant carry, although it hasn't
17 been there the last couple of years because of the
18 market, but the ability to actually put in storage
19 and hold it till the summer and carry, you just
20 don't have that kind of flexibility on the West
21 Coast.

22 MR. MATTHEWS: We don't have that kind
23 of flexibility, Drew, because we don't have the
24 storage built, but you don't have a need for
25 strategic fuel reserve in the areas you were

1 talking about because you saw it was in there
2 economic interest to build that storage at some
3 point and play in the market.

4 MR. LAUGHLIN: No.

5 MR. GIESKES: If I may add. Suddenly
6 the facts that right now there is a million four
7 in announced projects if all that would get built.
8 Certainly that would alleviate the need for the 2
9 1/2 million barrels of peripheral storage that we
10 saw, that you needed around or integrated with the
11 strategic reserve.

12 MR. HACKETT: I don't know that our
13 analysis --

14 MR. GIESKES: Let me continue. If we
15 look at the amount growth of import volume, and
16 you wanted to keep inventories at sort of the
17 current ratio of turns, then you would really have
18 to need another 3 million barrels between now and
19 2010. It comes along way, it is certainly very
20 good to see that some new capacity is on the
21 books, but it's not anywhere near solving the
22 problem as we see it.

23 MR. HACKETT: It was reported to us that
24 there is one facility where they had an upgraded
25 or refurbished 600,000 barrels of old tankage and

1 brought it back on line. All that is booked up at
2 this point. There is ethanol in some of it, and
3 their existing customer base took the rest.
4 Evidently with this stuff, as soon as it came on
5 line, it got leased out or filled out.

6 MR. GOLDSTONE: Sy Goldstone, Energy
7 Commission. I was just following up on Scott's
8 point. I think what you said was in other parts
9 of the country, people are building the storage,
10 but in California we are tight on storage
11 presumably because we have all these permitting
12 problems, which we heard about earlier.

13 I think you are saying if we -- I'm not
14 saying we can solving the permitting problems, but
15 if we made a significant headway in solving the
16 permitting problems, would we still need a
17 strategic petroleum reserve or not in your view?

18 MR. HACKETT: Our internal debate about
19 this all along -- I mean, it is quite clear to us
20 that there is a shortage of capacity, there is no
21 two ways about that. We are convinced that is the
22 case.

23 There are a hosts of reasons why there
24 is a shortage and hopefully we've hit all those.
25 All right, let's say that the state supports the

1 construction of additional capacity through loan
2 guarantees or fixes the permitting process, or
3 whatever it takes to reduce the risk that the
4 market participants have in constructing
5 additional storage.

6 Let's say that happens. All right, and
7 additional capacity is constructed. At that
8 point, where you've got let's say 2.5 or 5
9 million barrels, whatever the number is, at that
10 point, does the industry fill up that gas tank
11 themselves, in which case you don't need a reserve
12 at all. That is entirely possible. We don't know
13 the answer to that yet.

14 MR. LAUGHLIN: Sy, I want to clear up a
15 point too. It isn't that tanks are being built on
16 the Gulf Coast because of permitting problems or
17 we don't have the permitting problems here. What
18 has happened here is that as refineries have shut
19 down, as facilities have changed hands, the
20 terminals where the tankage of these facilities
21 becomes available as a terminal. In fact, one of
22 the ways not to clean up an old refinery is to
23 basically make sure it stays as a terminal.

24 What has happened isn't that there's
25 much building of new tankage on the Gulf Coast or

1 the East Coast, but the tankage is being changed
2 over from different gasoline and refineries and
3 just becoming terminals.

4 We have had this happen in numerous
5 places in the Gulf and East Coast as refineries
6 have shut down over the last twenty years.

7 MR. SCHREMP: Drew, this is Gordon.
8 Besides that behavior, do you see any changes in
9 the tank rates as a result of people now having
10 more capacity and willing to lease it out to
11 somebody else?

12 MR. LAUGHLIN: Yeah, tank rates have
13 consistently inched up on the Gulf Coast and the
14 East Coast, but by far the West Coast numbers are
15 by far and away, whether it is just because of the
16 cost of the tankage or the permits or just the
17 lack of tankage, your numbers are significantly
18 higher than the rest of the United States on
19 storage rates.

20 PRESIDING MEMBER BOYD: Drew answered
21 the question that has been rattling around in my
22 mind ever since Scott asked his question about the
23 economic and culture differences between the East
24 Coast and the West Coast and whether that is old
25 storage that is just being utilized versus having

1 built new storage, and I guess Drew answered that.

2 MR. LAUGHLIN: There is very little -- I
3 would really like to know the answer to that
4 myself, but I really believe that the amount of
5 storage that is being built, new storage that is
6 being built is minimal, very minimal.

7 PRESIDING MEMBER BOYD: We're a state
8 who has gone from 18 to 20 million people back
9 there in the good old days to 35 million people
10 with fewer refiners, twice as many cars driving
11 twice the distance they used to, etc. etc., so we
12 have really compounded our problems significantly.

13 MR. LANZA: Robert Lanza from ICF
14 Consulting here. I would like to follow up on the
15 previous commenter's questions with respect to
16 permitting.

17 With respect to the State incentivising
18 private entities to build more storage capacity or
19 private entities taking this upon themselves, the
20 permitting issues are more or less the same. You
21 are going to see permitting barriers that exist
22 now whether you pursue the additional storage
23 through strategic fuel reserve or through other
24 private sector means.

25 If you're in the position where you are

1 taking bids from private entities to expand
2 existing facilities, you potentially have the same
3 problem you would have with expanding tankage at a
4 refinery where they would potentially have to
5 reopen their Title V permits and other permits to
6 add this additional capacity. They might not want
7 to do that to add one or two tanks if there is not
8 an incentive to do so.

9 The permitting barriers will need to be
10 addressed regardless of whether there is a private
11 sector or public sector approach to solving the
12 problem of storage capacity.

13 PRESIDING MEMBER BOYD: I see your
14 point. I agree, there is 35 million of us, and
15 there is no middle of nowhere, nobody wants
16 anything in their back yard these days.

17 MR. LANZA: There's a fundamental
18 difference between siting a free standing new
19 storage facility and soliciting existing storage
20 facilities to expand in terms of how that
21 permitting works.

22 The more facilities you have involved in
23 this, the more permits you are reopening. There
24 are down sides to siting a whole green field new
25 facility, and there are down sides to expanding

1 six different facilities in various regions
2 throughout the state. Those downsides and upsides
3 have to be analyzed and balanced.

4 COMMISSIONER GEESMAN: I would think a
5 common theme of most of the comments today would
6 be that all paths seem to be leading toward
7 reevaluating a dysfunctional permitting
8 environment.

9 MR. LANZA: That's certainly true, that
10 permitting process does need to be reevaluated
11 with respect to how the process functions, the
12 redundancies, etc. What I am saying is there are
13 differences in how that evaluation would be
14 conducted if the objective is to solicit existing
15 facilities to expand versus siting a new facility
16 with the same capacity.

17 COMMISSIONER GEESMAN: Yeah, and I
18 think --

19 MR. LANZA: You would look at it a
20 little bit differently depending upon how you were
21 going about doing this.

22 MR. GEESMAN: I think that question may
23 be independent of whether the state wants to take
24 on additional financial risk by venturing into the
25 energy markets. That is an area that we have not

1 exactly covered ourselves with glory in before.

2 (Laughter.)

3 MR. LANZA: That is certainly true,
4 whether the state is taking on financial risk
5 versus whether private sector entities are going
6 to jump into the expansion of capacity because of
7 other private sector incentives. Yes, you are
8 right, there is no difference there.

9 The difference is whether the State
10 wants to take the financial risk, or whether the
11 incentives can be provided in some other manner.
12 The permitting issues are what they are.

13 MR. STEVENSON: Okay, I think I've been
14 pulled into a fight here. It never seems to work
15 well, but just thinking about this from the simple
16 persons standpoint who runs some inventory.

17 PRESIDING MEMBER BOYD: Excuse me, could
18 you just, for the recording, give us your name
19 again.

20 MR. STEVENSON: Dwight Stevenson,
21 Tesoro. In managing inventory levels, if I know
22 someone else has got some inventory out there, if
23 I'm out, I can call and have that inventory
24 tomorrow, I'm going to go to lower inventories.
25 There is a lot of incentive to reduce inventories,

1 reducing cash, you know, being out there in
2 gasoline, and having more cash in your pocket is a
3 good thing.

4 I think if there is 2.5 million barrels
5 of gasoline out there that I can call on and get
6 next week or tomorrow, you know, we are going to
7 be going down in inventories, and how do you
8 consider that impact?

9 It appeared to be that you were layering
10 that 2.5 million barrels on top of the current
11 inventory, and I would think if you put that 2.5
12 million barrels into the system, it would drop out
13 a significant amount of inventory out of current
14 tankage.

15 MR. HACKETT: I think that's worth
16 talking about, and certainly the CEC guys have
17 concerned about this. From my perspective as a
18 guy who used to manage inventory, and Dwight is
19 out at Tesoro and he's -- you're the gasoline
20 blender still?

21 MR. STEVENSON: I work in the area,
22 yeah.

23 MR. HACKETT: Yeah. From our
24 perspective or from the perspective -- I had
25 twenty years at Mobil doing this sort of thing, in

1 thinking about inventories, in general, what we
2 did is we figured out how much inventory it took
3 to run our business. We called that a minimum
4 operating inventory, and that was sort of the sum
5 of all the tank bottoms and line fills and all of
6 the fixed kind of number.

7 We sort of backed into the rest of it,
8 essentially, by experimenting. We experimented
9 down -- we figured out what our minimum inventory
10 was, and that was essentially defined as the point
11 at which the people involved with us could sleep
12 at night. They didn't get called in the middle of
13 the night to say, hey, we missed a blend and what
14 are we going to do and the rest? We experimented
15 and we found that inventory.

16 In order for the operators to be able to
17 sleep at night, we added some to that, and that is
18 where we ran our business. In general, while we
19 had some additional inventory capacity, we
20 typically used that additional inventory capacity
21 ahead of known problems. We knew we were going to
22 have a turn around, for example. We would, in
23 general, probably fill up the tank, it depends on
24 the extent and duration of turn around and the
25 rest of the stuff you know very well.

1 We even went to the extent where we had
2 to hire outside storage from time to time if we
3 knew that the refinery was going to be able to
4 hold it.

5 MR. STEVENSON: I'm just talking about
6 the normal business that you're at, you don't have
7 any turn arounds coming up, you've got pretty
8 smooth sailing as far as planning is concerned,
9 where is that inventory. You know, obviously, you
10 are not going to be able to get at the tank
11 bottoms, you can't get into that, but where are
12 you -- you are going to go down some, though. If
13 I've got -- if the call is hey, the blend didn't
14 pass, what are we going to do. Hey, call up SFR
15 and have them deliver the 100,000 barrels. That
16 will allow you to go to lower inventory.

17 MR. HACKETT: Your inventory decision,
18 though, is an economic one. That is to say, what
19 does it cost to keep that inventory. What do we
20 expect with this SFR, there will be transaction
21 costs. Is it going to cost you something to go
22 get it?

23 Today, for example, you might be able to
24 run at a lower inventory because you know that
25 refinery next door is there to back you up. You

1 miss a blend, you can call one of your colleagues
2 and they will pump your tender today because you
3 will give it back to them tomorrow.

4 MR. STEVENSON: That's used too, yeah,
5 I'm sure.

6 MR. HACKETT: The fact of the matter is,
7 the strategic fuel reserve concept, I believe, is
8 going to have transaction costs. There are going
9 to be economic consequences for using it. You are
10 going to have to pay some kind of transaction fee,
11 and because in our concept it's an auction, there
12 is no guarantee that you're going to be the winner
13 or that you are going to necessarily like the
14 price that you have to pay in order to take the
15 gasoline out and return out.

16 MR. STEVENSON: Presumably it is going
17 to be a market price.

18 MR. HACKETT: Right. Presumably it
19 would be a market price, and likely the
20 transaction costs, there would be some sort of a
21 fee plus, you know, whatever you bid in the
22 auction. Whatever you bid in the auction is
23 likely the slope of the backwardation. That would
24 probably describe what the value of the oil when
25 you return it later.

1 MR. STEVENSON: Okay, it might be
2 backwardated or it might be contango, but either
3 way, refiners are going to drive toward lower
4 inventories, that is just the nature of the
5 business.

6 It appears to me that with this safety
7 net that there is going to be, you know, the
8 refiners are going to be pulling down their
9 inventories and the benefit of having -- the
10 claimed benefit of having this 2 million barrels
11 of insurance is going to be reduced possibly,
12 mostly eliminated.

13 MR. GIESKES: Dwight, a couple of things
14 here. What is added is about 5 percent of the
15 total currently available gross storage capacity,
16 42 million barrels of tank capacity between the
17 refineries and the bulk terminals.

18 Adding 5 percent to that capacity is not
19 that big a deal in terms of that capacity being
20 largely used operationally currently. What is
21 more that half of the inventory is like Gregg
22 said, it is pipeline fill. It is on the water, on
23 the way to -- once you set up this rolling
24 inventory principle, I mean, it's actually about a
25 million barrels. Like Dave said, it is a matter

1 of cost.

2 I think if you were a refinery inventory
3 manager, for instance, for turn around coverage or
4 for that sort of thing, you were to indeed reduce
5 your operational inventories, we never really
6 looked at it. We looked at discretionary
7 inventories for trading purposes.

8 Reducing your operational inventories,
9 to me, given the current tightness of the
10 situation -- think about Rule 1178, Rule 1178
11 would take out 10 or 15 percent of the operational
12 inventories, and refiners all said, there is no
13 way we can do this. All refiners are on record in
14 this public hearing saying that.

15 Adding 5 percent, I don't know, maybe
16 you would see some reaction upgrades for
17 inventories, but I honestly doubt it.

18 MR. STEVENSON: I guarantee it.

19 MR. GIESKES: I also recognize that not
20 all refiners are created equal, and some have much
21 more ample inventories than others. There are
22 refiners that have more tankage than some of your
23 colleagues and are tighter than you are.

24 There may be some cutting down on
25 operational inventories, although, given the

1 current tightness and the narrow range in which
2 those inventories currently move, that is, from
3 our perspective, not all that likely.

4 MR. HACKETT: Dave, you are talking
5 about the fees to utilize it, and this is one of
6 the problems that I've got with this process is
7 that has never been anything specific to say, this
8 is how it is going to work.

9 There has been some generalized -- the
10 rules are kind of, it's dynamic, it's got some,
11 you know, and I can understand that maybe a little
12 bit, but if there is a continuous in and out
13 process, and I've heard it described that way
14 where there's continually replenishing of
15 inventory and maintaining aesthetic seemingly
16 inventory would be consistent with that.

17 There seems to be a difference there,
18 but without knowing what the costs were -- I would
19 think you would want to have those costs low if
20 you want to use it. You don't want to create a
21 huge penalty for people to use it. If it cost
22 \$.15 to use it, then no one is going to use it in
23 the first place.

24 MR. HAGGQUIST: Dwight, these are good
25 questions and serious ones, this is the type of

1 exploration that needs to be done. I'd like to
2 ask if your refinery were situated in the Gulf
3 Coast or the East Coast whether it was a NYMEX,
4 and if you can grab those NYMEX barrels, you could
5 reduce your inventory. Sunoco or ConocoPhillips
6 in Philadelphia can reduce their inventories by
7 the fact that there is a NYMEX next door, and they
8 have the right to draw a physical inventory from
9 the NYMEX next door anytime.

10 In a sense, this is what is being
11 imagined here, and the second point about how has
12 this been described. It has been described in the
13 addendum to what is on the internet now, the
14 addendum attachment B gives a words eye view of
15 how this would, in fact, operate, and it also
16 gives views from different perspectives. How
17 would it be seen from Australia, from Caribbean,
18 from a local refinery here. You get a panoramic
19 view of how this would operate the mechanism by
20 which you would operate. Certainly not in detail,
21 but enough to get the picture.

22 MR. STEVENSON: Those details are
23 important. How much would it cost if it is a
24 quarter of a cent, the kind of normal exchange
25 differential that you might see borrowing it from

1 refinery A next door, then --

2 MR. HACKETT: I think we thought that
3 order of magnitude was probably going to be around
4 two cents, something more expensive than borrowing
5 from the guy next door, but not so much as to make
6 it impossible to use.

7 MR. GIESKES: Dwight, one of the reasons
8 that we thought that the operational inventories
9 were really hard limits is that 9.5 to 10 million
10 barrels, that seems to be the bottom of the
11 operational range, and we are all summer long,
12 California is struggling along in that range.

13 The reason that we thought refiners
14 cannot reduce that inventory is that if they
15 actually could, they would have. The incentive,
16 if you can sell gasoline at (indiscernible) at
17 twenty bucks a barrel, you are sitting on 2
18 million barrels as an industry, you can actually
19 sell those, those are not hard limits, why don't
20 you currently?

21 MR. STEVENSON: Is that a question?

22 MR. GIESKES: That's a question, yes.

23 MR. STEVENSON: Okay. The answer is the
24 issue of failed blends, and having the gasoline
25 blended ahead of the pipeline in enough time so

1 that you don't miss the pipeline cycles. If there
2 are no consequences of having the blends fail, and
3 you just call up and have that 3 cents is
4 obviously a pretty high price, but --

5 MR. HACKETT: Dwight, would you walk --
6 for everyone's education, would you walk through
7 for us how the process, you have a failed blend,
8 and then what happens from there? What's the
9 timing and who do you call and that sort of thing?

10 MR. STEVENSON: I think that would take
11 a little too much time. I probably --

12 MR. HACKETT: It is my impression,
13 though, that's something that if you have a failed
14 blend, you realize it is failed now, you don't
15 have time to correct it before the batch pumps,
16 your trader calls one of his colleagues at a
17 different company and says, hey, can you pump
18 this. He calls his refinery and it goes out
19 tonight. That is not the kind of thing -- that's
20 a prompt immediate reaction, got to have it right
21 now in order to keep customers satisfied.

22 It is not the kind of thing where we
23 envision this SFR as it will pump the next
24 pipeline cycle, it won't pump tonight, so maybe
25 that is a bit of difference.

1 MR. STEVENSON: Okay, so you are putting
2 limits on it. First of all, you are putting three
3 cents a gallon on the cost, so that would reduce
4 its utility. You are saying it can't pump tonight
5 or tomorrow. These pipeline -- these refinery
6 outages, there's going to be less utility there
7 too.

8 Again, without knowing the specifics and
9 the rules, it is hard to say how it would be used.

10 MR. HACKETT: Let me ask you a question.
11 Is there sufficient inventory capacity in
12 California for products now, in your opinion?

13 MR. STEVENSON: I'm no expert, I'm not
14 even going to say. I won't even try to answer
15 that one. I'm getting bated.

16 (Laughter.)

17 PRESIDING MEMBER BOYD: It happens when
18 you stand up here.

19 MR. STEVENSON: I can't answer that, I
20 don't know, it appears to be, it appears to be.
21 Cars don't run out of gas on the side of the road,
22 so I guess there must be.

23 MR. HACKETT: With gas being \$.45 or
24 \$.50 a gallon over the rest of the country, that
25 doesn't have anything to do with inventory

1 capacity or refinery performance or anything like
2 that?

3 MR. STEVENSON: Oh, yeah, let's take two
4 days and talk about that one.

5 PRESIDING MEMBER BOYD: We probably will
6 all day tomorrow.

7 MR. STEVENSON: No, just as a guess, I
8 would say most of that is not due to not having
9 2.5 million barrels of inventory.

10 PRESIDING MEMBER BOYD: I hope tomorrow
11 we do discover what it is due to because the
12 California public is getting pissed.

13 MR. STEVENSON: I just see that as a
14 concern. The claimed benefits of having this
15 extra 2.5 million barrels, you know, it seems
16 tenuous on a couple of counts.

17 One of them is I'm not sure that 2.5
18 million barrels would really exist as an
19 additional 2.5 million barrels. The other big
20 point I think I would like to make and then step
21 out of the firing range would be how would you
22 know when to draw this inventory down?

23 Presumably if you are saying "dynamic"
24 you are talking about actually using the inventory
25 up. Drawing it down from 2.5 million barrels to

1 minimum. Without doing that, it seems like there
2 is very little utility to the inventory.

3 MR. HACKETT: It would be done on a time
4 slot basis, people would come in and bid to lift.

5 MR. STEVENSON: Somebody could do it
6 whenever they wanted to, in other words.

7 MR. HACKETT: There will be a set of
8 rules that go with that, but yeah.

9 MR. STEVENSON: If you pay your three
10 cents a gallon or whatever.

11 MR. HACKETT: Or whatever it is, I said
12 two.

13 MR. STEVENSON: Oh, okay, two was it?
14 All right.

15 MR. HACKETT: That is what we sort of
16 thought as we were thinking about this.

17 MR. STEVENSON: Okay. My point on that
18 would be, you know, what constitutes a big enough
19 emergency. If someone says, hey two cents a
20 gallon, it is worth it, I'm going to pull it out
21 of there, and then there is a real big outage.
22 You know, if somebody's 25,000 barrel a day
23 reformer goes down and they pull down that
24 inventory because it is worth it for two cents.

25 MR. HACKETT: That's right.

1 MR. STEVENSON: Then that inventory is
2 gone, and it is not available for the big --

3 MR. HACKETT: When is it going to be --
4 your question is when is it going to be replaced,
5 I think.

6 MR. STEVENSON: It sounded like six
7 weeks.

8 MR. HACKETT: Yeah, so the first tender
9 pumps in the next cycle, and then six weeks after
10 that, you know, gasoline starts showing up -- six
11 weeks or less gasoline starts showing up.

12 MR. STEVENSON: If your reformer outage,
13 you know, small reformer outage, and someone said
14 it's two cents, I'm going to pull down a million
15 barrels for that.

16 MR. HACKETT: Right.

17 MR. STEVENSON: You have directly
18 following that a real outage, then --

19 MR. HACKETT: Of course, that million
20 barrels of gasoline has gotten into the
21 distribution system at that point.

22 MR. STEVENSON: My point is that the
23 other means that company would have had would have
24 been to pull in a million barrels from off shore,
25 but why do that. Why bring in the gasoline

1 because I've got it right here.

2 MR. GIESKES: Dwight, we looked at it in
3 some careful detail, and we used the '99 series of
4 outages that was that one graph that I showed.
5 That graph assumed that half of the inventory
6 would be on the water on the way in various
7 stages, so 1.3 million barrels would still be
8 sitting in the tanks.

9 That 1.3 million barrels, and actually
10 only 900,000 barrels out of that would have been
11 sufficient to counteract the inventory degradation
12 over the two worst outages.

13 We have looked into that, we've
14 quantified it --

15 MR. STEVENSON: Thomas, it seems real
16 squishy to me. If you've got a dynamic system,
17 that means that inventory is going to be coming
18 down, and you may not have any inventory on the
19 water. If you are not utilizing it --

20 MR. GIESKES: No, that is why there is a
21 limitation on the total draw. This auction is
22 limited, and that is why it is an auction. There
23 is a limited volume available on a given day or in
24 a week or whatever --

25 MR. STEVENSON: Right, but if no one has

1 bought any, and there is no --

2 MR. GIESKES: If no one has bought any,
3 then the tank is sitting full. If everybody has
4 bought something, then half the inventory is in
5 the tank, and half the inventory is on the water
6 coming in. That is the basic premise of this
7 rolling inventory.

8 It is a pipeline filled with imports.
9 Whatever you do, if you have -- currently, if you
10 have an outage, you have to start from scratch,
11 that is when you start filling the pipeline.
12 Gregg's analogy was very ample, it is the
13 equivalent of the Colonial.

14 If the Colonial was sitting empty
15 waiting for an outage to occur in New York, you
16 would have to start pumping when the outage
17 occurs. You would be in much deeper doo doo than
18 you are when there is a continued filling
19 pipeline. The whole incentive of this, say, for
20 traders is currently that they have to wait and
21 see and sort of try to guess how long is this
22 outage going to last. It takes a while for the
23 pump to prompt, it takes a while for these imports
24 to be mobilized as was the case in '99.

25 I must say, it took about six weeks

1 before the first cargo started showing up, and it
2 started showing up in great numbers. The idea is
3 that you have at any point in time no more than
4 half the tank filled on the water, but that tank
5 fill is on its way, so you don't have to wait
6 until the pump prompts, there is a big big
7 difference here.

8 MR. STEVENSON: You can only use half?

9 MR. GIESKES: We've looked at this in
10 great detail, I can assure you. It's not just
11 hand waving or -- the commercial principles are
12 not worked out, but the physical side of it is
13 much easier to calculate.

14 MR. STEVENSON: I'm going to let the
15 professionals take care of this tomorrow.

16 (Laughter.)

17 PRESIDING MEMBER BOYD: All right.
18 Anyone else have any comments, questions?

19 DR. VERLEGER: Two quick questions.
20 One, I just heard somebody there say something
21 about Sunoco or something have a --

22 UNIDENTIFIED SPEAKER: Can you identify
23 yourself?

24 DR. VERLEGER: Philip Verleger, I did
25 this before. Sunoco having a right if it had a

1 position on NYMEX to do something anytime. Could
2 you explain that point again, please?

3 MR. HAGGQUIST: Yeah. Dr. Verleger,
4 this is Gregg Haggquist. It is in his response to
5 the probability that the refiners would reduce
6 their inventory, operational inventory because
7 this existing rolling stock in the strategic
8 reserve is available. Therefore, they can count
9 on that and go get that instead of keeping the
10 inventory that they need.

11 It triggered in my mind the association
12 of refiners on the East Coast, such as Sunoco, any
13 refiner east of the Rockies who can draw on, who
14 can buy or do a time swap on the NYMEX. Once they
15 have done a time swap on the NYMEX, they can
16 convert that to an EFP, and they can require
17 physical delivery from the NYMEX, so they too can
18 reach to this huge tank, which is a NYMEX in New
19 York Harbor.

20 To what degree, I ask, does that
21 influence their decisions on minimum inventories?

22 DR. VERLEGER: Okay. How quickly can
23 they reach into that tank on the NYMEX?

24 MR. HACKETT: The prompt delivery month.
25 Right now we are at the end of April, so they

1 would be able to do that in June. June would be
2 the prompt month by now.

3 DR. VERLEGER: Let me -- I've been an
4 expert witness in two delivery manipulation
5 lawsuits, so let me put some facts on the table
6 because you've got them wrong.

7 Delivery on the NYMEX is what's called a
8 buyer's call, that is, the buyer can specify the
9 delivery window in the next month. The contract
10 stops trading on the NYMEX for the products on the
11 last trading day of the month. The May contract
12 will stop trading on April 30. A company can call
13 for a delivery starting the first Monday in May or
14 something like that, presuming they take a
15 position.

16 On an EFP, an EFP is a negotiated
17 contract. The term is "exchange of futures for
18 physicals", you said something else earlier. Let
19 me get the language correct. That is a
20 transaction which is willingly entered into by two
21 parties, so you have to find a supplier who would
22 agree to provide it, provide the product, and it
23 would have to be negotiated, a premium, and it
24 would be posted because what's going to happen is
25 a short and a long position is going to be taken

1 off.

2 It is not something you can -- Sunoco
3 can't just go in and say, okay, I'm going to do an
4 EFP and get the gasoline. The delivery location
5 on the NYMEX is a seller's call. That is, the
6 seller can designate where it's going to occur.

7 This matters in future's markets as Jeff
8 can tell you because prices can go -- locations
9 can differ, so that the description that you have
10 made there is seriously at variance with the way
11 the market works.

12 I know of no company, having worked with
13 these companies, that would rely on that in the
14 way you've described. It's just hellacious.

15 MR. HAGGQUIST: Just a moment. At that
16 point. These are all acceptable, I've done many
17 of these EFP's, I know how they work, hundreds of
18 them.

19 The point I am making is, since you also
20 have said that they would never rely on those
21 EFP's, the question is, would this system, if it
22 existed in California, encourage refiners to rely
23 on these uncertainties. Are they going to win the
24 auction? That's really the question. Will they
25 reduce their inventory because of that.

1 MR. LAUGHLIN: In the East Coast, I
2 don't know of any refiner who counts on the
3 delivery of a merced barrel and reduces their
4 inventory at all. That is a -- as you said, if
5 somebody has a problem he can basically force
6 delivery sometime in the next month. I agree with
7 you, I think we have all said the same thing here
8 just now, is that basically the refiner would not
9 count on the merc or in this case on the SFR, and
10 then reduce his inventories. Not consistently.

11 DR. VERLEGER: I'll discuss that
12 tomorrow. I think the evidence, world wide, is
13 something at variance with that.

14 A question for Tony on slide 27.

15 MR. GIESKES: Can I come back on this
16 dispute. I think we are all in agreement here,
17 actually. We both say that this can be done. It
18 was not that Gregg said that refiners would do
19 that, he said that refiners will not do that.

20 DR. VERLEGER: I heard him say it would,
21 that is why I wanted to get the record correct in
22 terms of what.

23 Number 27 of your presentation.

24 DR. FINIZZA: I need three engineers on
25 this will.

1 DR. VERLEGER: There you go, you went by
2 it. You went by it, past, there. The red area
3 you show there, \$750 M, as I recall, a good
4 portion of that got caused by some off spec
5 gasoline that had to be pumped out of tanks in San
6 Diego and taken back to the refineries. It was
7 actually your former employer's tanks, I think.

8 The question is, how is the SFR going to fix
9 that? I mean, if the off spec goes down, it's a
10 logistical thing, they have to get the trucks and
11 bring it out. Isn't most of that \$750 M due to
12 something that even with an EFP and SFR would have
13 happened anyway?

14 MR. SCHREMP: Dr. Verleger, this is
15 Gordon Schremp, I can shed some light on that.
16 Since these gentlemen were not involved in the
17 investigation of that price spike.

18 The Arco or the AM/PM issue had to do
19 with off spec gasoline in terms of not having
20 adequate amount of ethanol in the fuel delivered
21 to a number of service stations. That, in our
22 opinion, its staff had no impact at all on the
23 recent price increase in the spring of this year.

24 It was a situation where Arco was unable
25 to dispense regular gasoline for a period of less

1 than five days at some of their service stations.

2 The gasoline was returned, brought back to spec in
3 short order, and resupplied to the stations.

4 It did not affect the output of the
5 refinery nor output their service stations except
6 in this one instance.

7 DR. VERLEGER: As I understand it, there
8 were some retail prices of \$4.00 a gallon. What
9 you are saying, the retail price of \$4.00 a gallon
10 in San Diego had nothing to do with this.

11 MR. SCHREMP: Yes, that is correct. In
12 fact, we did look into that specific example side
13 by both Governor Davis and extensively in the
14 press there is an individual at a station who did
15 set a very high price for his gasoline. That was
16 unrelated to what happened to the Arco service
17 stations.

18 It had to do with a dispute he had with
19 the prime supplier, totally unrelated, and in
20 fact, his prices actually went up later on. It
21 was totally unconnected with what was going on
22 with the Arco situation as well as the overall
23 price spike.

24 DR. VELEGER: What you are saying is the
25 disruption of Arco's distribution had nothing to

1 do with the rise in price of gasoline?

2 MR. SCHREMP: Yes, Sir, that is correct.

3 MR. HAGGQUIST: I think it should be
4 added, by the way, Dr. Veleger, is that the
5 question is if the SFR, as we've described it, had
6 been in place, and let us say that San Diego had
7 everything to do with it, you could see the
8 backwardation at the time. The market jumped up,
9 the wholesale spot market went up by \$.25, it went
10 to \$1.50 plus, right. At that point in time, OPIS
11 is printing the next forward price at \$1.30, \$.20
12 lower.

13 You trigger the auction, somebody is
14 going to win that auction, going to take the
15 barrels out of the SFR and are going to replace
16 them at that \$1.20 within -- that \$1.30 within six
17 weeks. They are going to bid something, they are
18 going to bid some portion of that \$.20
19 differential in order to win the auction. They are
20 never going to bid the price. The beauty of this
21 is that nobody ever buys any barrels, the
22 government never sells anything, nobody regulates
23 any markets. What you simply do is connect the
24 arbitrage, the backwardation of the market is
25 pulled in the front and you smooth it out, right.

1 If that refinery needed 100,000 barrels,
2 they go in and bid 100,000 barrels, boy, we can
3 replace this, we'll fix this San Diego problem, we
4 will replace these barrels in a month. Okay,
5 we'll bid \$.10 because we can replace it as \$.20
6 cheaper. They give \$.20 to the SFR for 100,000
7 barrels, they get the 100, not a ripple in the
8 market, and you define at exactly what the month
9 forward price really is, it's prompt plus \$.10.

10 COMMISSIONER GEESMAN: If I could shed
11 this job and go back to being an investment
12 banker, couldn't you and I capitalize this
13 business and we wouldn't have to capture very much
14 of that consumer benefit to make out pretty well?

15 MR. HACKETT: Yeah, you know, that has
16 been part of our debate all along. If this is
17 such a good idea, why don't we go do it. The
18 issue gets to be you've got to have the physical
19 facilities to pull it off. Could this be a bank,
20 could this be a real bank, I don't understand
21 finance well enough to be able to tell that or
22 not, but until you get the tanks, it is sort of an
23 academic debate.

24 COMMISSIONER GEESMAN: I'd encourage you
25 to talk to the bankers, you could probably find

1 the tanks.

2 MR. HACKETT: You know what's
3 interesting is they have started to circle around.
4 We have seen a few of them show up, call up and
5 say, now, tell me what it is you guys are doing
6 with this. Maybe we ought to have more
7 conversation.

8 MS. STAMETS: Leigh Stamets with the
9 staff. I noticed that you were talking about
10 starting this summer grade gasoline. How do you
11 envision that going through the year, summer, then
12 winter?

13 MR. HACKETT: Thanks for asking that,
14 Leigh. In Southern California, the winter is
15 three and a half months long about, call it the
16 first of November to the middle of February or,
17 you know, I'm not sure when the Air Board is going
18 to change the definition. It had been the middle
19 February, this year it was sort of the middle of
20 March.

21 When you look at the disruptions and
22 inventories and the rest of the sort of thing, you
23 quickly discover the winter time is no big deal,
24 and in general, gasoline is easy to make.
25 Refiners can put butane in it, raise the REP, that

1 improves their distillation, helps them with their
2 octane, and so if there are refining problems, in
3 general, you don't tend to see those in the market
4 place. I think probably when you look at the
5 charts on backwardation contango, you see the
6 contango tends to be in the winter time.

7 This tends to be the price spikes and
8 the shortages in inventories and the rest, that
9 tends to be a summer problem, that is why there is
10 summer CARBOB.

11 If it turns out that somebody -- you get
12 to the point where someone actually has the
13 economics to go knock on the door, the teller
14 window of the bank, the Gasoline Bank of
15 California in the winter time, then that is an
16 issue.

17 I think, likely what would happen there
18 is that the volume in the SFR had to be traded
19 around with a refiner, where would the blender, if
20 there is one who will tickle it up to the proper
21 REP. Then the whole issue is revapor based on the
22 volatility of the gasoline.

23 MR. STAMETS: To anticipate, you just
24 carry it through the winter then with no
25 exchange?

1 MR. HACKETT: That's right. There is
2 issues of shelf life. Any time you look at this
3 stuff, you have to think about the shelf life
4 issues. It is our guesstimate, we haven't run or
5 done any tests or the rest of that sort of thing,
6 but it is our guesstimate that CARBOB is likely a
7 much more stable product than other gasolines
8 because it is so highly refined. It is low in
9 sulfur, low in aromatics, and the like, and
10 therefore, ought to have pretty reasonable shelf
11 life.

12 Again, that is one of those details, one
13 of those critical details that you need to look
14 into in the next phase.

15 MR. SCHREMP: In fact, Dave, this is
16 Gordon again, the Air Resourcing Board is on
17 record of stating on their opinion the gasoline
18 shelf life for the Phase II gasoline, both non-oxy
19 and with MTBE does have a shelf life of at least
20 six months. That also carries through, as you
21 say, to Phase III CARBOB, then that should
22 certainly get you through a winter period.

23 PRESIDING MEMBER BOYD: This is getting
24 good. Who is next?

25 UNIDENTIFIED SPEAKER: Is this the

1 public comment period?

2 PRESIDING MEMBER BOYD: We haven't quite
3 got there yet. I just want to make sure everybody
4 got their discussions and questions out of their
5 system. Dr. Williams is leaning forward --

6 DR. WILLIAMS: I have my list tomorrow.

7 PRESIDING MEMBER BOYD: Okay, you're
8 just uncomfortable like the rest of us. Okay. I
9 can thank these gentlemen for their presentation,
10 and the interesting discussion and question period
11 and turn to that part of the agenda that says
12 public comments. Are there publics out there?

13 Mr. Sparano sent in a card early this
14 morning, the only one who did that and said he
15 wanted to talk during the public comment period.
16 It has been a long day, Joe.

17 MR. SPARANO: Yes, I'll try to remember
18 that. Joe Sparano. Commissioners, thank you for
19 giving me this opportunity to share some
20 information with you.

21 As you know, I'm Joe Sparano, I'm the
22 newly appointed president of the Western States
23 Petroleum Association or WSPA.

24 WSPA is a non profit trade organization
25 which represents over 30 natural gas and petroleum

1 exploration production refining transportation and
2 marketing companies that operate in six western
3 states, here in California, Arizona, Nevada,
4 Oregon, Washington, and Hawaii.

5 I've been President of WSPA for a grand
6 total of four weeks, but have spent thirty-four
7 years in the petroleum industry working and
8 learning about it.

9 For more than fifteen of those years,
10 since 1987, I've had leadership positions in
11 California companies in this industry, both in
12 operations and finance. I am pleased to be here
13 today to represent that industry.

14 First, WSPA would like to acknowledge
15 the amount of effort the Commission, its staff,
16 the consultants have invested in understanding our
17 industry and the complexity of the gasoline
18 market.

19 We also recognize the administration's
20 concern about the state's recent gasoline price
21 volatility. However, we do not believe that
22 California fuel markets are broken. WSPA opposed
23 government mandates or subsidies that can
24 interfere with free markets in a way that is
25 detrimental to moderating price spikes.

1 I guess just a quick observation, price
2 spikes are called that for a reason. It's not a
3 price balloon, or a price rock, it is a price
4 spike indicative of a sharp movement upward or
5 downward. In this case, it's been upward. My
6 hope is that all of us can understand in a free
7 market economy that might not be that bad a thing,
8 but let me continue and maybe I will get that
9 point across.

10 We believe firmly that the free market
11 works, this is illustrated in one way by the fact
12 that even in the circumstances experience in 1999,
13 and we heard a lot about that earlier, and again
14 this spring, there were no gasoline market
15 failures.

16 As Dwight mentioned, our stations still
17 had fuel to sell all the time. Unfortunately the
18 term volatility has been characterized as a
19 negative term, but economic theory teaches that
20 price volatility is a normal part of any free
21 market. In fact, it sends a signal that the
22 market is operating efficiently and the mechanism
23 by which an efficient market tells participants
24 about its condition.

25 We believe the gasoline market is

1 healthy and the proof is the price the consumers
2 have paid for that product over many years. Over
3 the past twenty years, there have been several
4 major changes in the composition of California
5 Gasoline as mandated by the state and federal laws
6 and regulations.

7 These changed benefit both the
8 environment and the consumer, but they also come
9 at a cost. The improvements in fuel quality
10 started with removing lead from gasoline some time
11 ago followed by requiring additives, then
12 oxygenates, and several reformulations of gasoline
13 and diesel, including the change to Phase II
14 gasoline or California cleaner burning gasoline.

15 Our industry has already invested more
16 than 5 billion dollars in California to produce
17 cleaner fuels for California's driving public.

18 The next mandate is the elimination of
19 the oxygenate MTBE by the end of this year.
20 According to material I've read from CEC's
21 consultant in the same twenty period per capita
22 income increased in California by about 45
23 percent.

24 I believe I heard Commissioner Boyd
25 mention the number of extra people we have in this

1 state and the number of cars that drive and the
2 number of miles they drive and all that, I think
3 is additive in terms of the pressure on the
4 gasoline market for supplies.

5 Over the same time frame, the real
6 constant dollar cost of gasoline has fallen by 30
7 percent. The take home message here is that our
8 industry operating in a free market place has been
9 able to meet the environmental challenge of
10 producing cleaner burning fuels or be it at an
11 increasingly higher production cost while the cost
12 of these fuels to consumers has remained low
13 relative to other products and services.

14 Now why would I say that? The U.S.
15 Bureau of Labor Statistics reporting the consumer
16 price index or CPI indicates that gasoline prices
17 have risen less than many other products we use
18 every day, energy, electricity, food, housing,
19 medical care, to name a few.

20 Specifically, gasoline prices increased
21 less than 20 percent between 1982 and 2002 while
22 housing costs, in particular, are up about 100
23 percent, and the cost of medical care is up almost
24 200 percent in the same period.

25 On to the SFR proposal. WSPA would like

1 to respond to the SFR concept by focusing first on
2 some basic principles and beliefs. The U.S. free
3 market is a model of economic success and a
4 fundamental principle of capitalism, and I'm sure
5 everybody in this room is aware of that.

6 It is also the framework for our
7 successful history of economic activity and growth
8 in California. The petroleum industry is opposed
9 to market intervention by government as suggested
10 in this proposal. I know there have been some
11 comments to moderate that and talk about ways in
12 which the SFR might be managed.

13 It is still an artificial presence in
14 the market place. Prices of transportation and
15 fuels are set by market conditions, and history
16 has shown over time this produces quality products
17 at competitive prices. We believe that it is
18 unlikely that a California gasoline reserve would
19 eliminate price spikes.

20 Other markets such as New York Harbor
21 and the Gulf Coast have a history of volatility as
22 well, even though as we've been told in some of
23 the work of the consultants that these are ideal
24 markets, or perhaps more ideal than California's.

25 Historical attempts to control markets

1 in the U.S. have failed. I think we also heard
2 that earlier today, and there is a high likelihood
3 that the SFR will not materialize the way it is
4 planned. You certainly heard some serious
5 questions about it earlier.

6 Observations by knowledgeable experts
7 suggest that establishing a state fuel reserve
8 will wind up costing tax payers and consumers
9 potentially hundreds of millions of dollars. Now,
10 I am not sure I understand fully how the mechanism
11 of getting all this started would take place with
12 tenders and bids, but somebody is going to have to
13 pay to build tankage. Somebody is going to have
14 to pay to build control equipment. Somebody is
15 going to have to pay for land. Somebody will have
16 to allocate it even if they own it now. At the
17 end of the day, maybe or maybe they won't get a
18 permit.

19 All those factors, I think, can inject a
20 rather large cost component to this strategic fuel
21 reserve.

22 All this comes at a time when California
23 has a staggering budget deficit that, again,
24 everybody in the room is aware of. The prospect
25 of job loss is an economic down turn continue.

1 The SFR concept is poorly conceived
2 because it would likely disrupt free market
3 gasoline supply and storage, increase reliance on
4 imports and higher costs, perhaps those costs
5 being subsidized as we heard earlier, and further
6 add to price volatility, not reduce it.

7 Finally, expansion of refinery
8 production capacity may be the lowest net cost
9 option for meeting product demand, growth, with
10 additional supplies, even though as we've heard
11 it's quite difficult to make that happen, but
12 those projects, generally speaking, will cause an
13 increase in jobs through the construction phase
14 and then a complimentary increase in longer term
15 jobs at the facility where the new equipment has
16 been installed.

17 A few observations about refining and
18 storage capacity expansion. WSPA believes that
19 the existing fuel supply infrastructure can meet
20 current demand barring a severe disruption. We
21 also acknowledge that supply and demand is tightly
22 balanced, but demand for petroleum products here
23 in California is growing each year.

24 This balance is due to a variety of
25 factors, some are outside the state's control,

1 like world crude oil prices and economic
2 conditions. However, some are within the State's
3 control.

4 Specific uncertainties in California
5 concerning the impacts of our boutique fuels,
6 renewable fuels mandates eliminate, elimination of
7 the oxygenate requirements and the legal challenge
8 to the Unocal patent, all of which we have heard
9 about in some form or another today.

10 Each of those adds another layer of
11 complexity in making decisions about the future
12 use of our industry's limited capital.

13 There are many complex and real
14 regulatory physical and logistical constraints
15 that exist to expanding California's petroleum
16 infrastructure. The answer should not be to
17 propose and mandated SFR that potentially will
18 face some of the same constraints.

19 Efforts should focus instead on helping
20 to mitigate or eliminate these challenges that
21 I've mentioned in order to facilitate new private
22 sector capital investment, which should produce
23 more jobs and a stronger economy.

24 WSPA does not agree with the SFR
25 proposal before the Commission, however, we

1 believe there are some alternative constructive
2 steps that can be taken that will allow the State
3 of California to assist with meeting future
4 marketplace challenges.

5 These steps, some of which are already
6 supported by state agencies, will remove barriers
7 to increasing supplies that will enable us to meet
8 future demand.

9 As a group, our objective should be to
10 streamline state and local permitting, including
11 the CEQA process. For example, we understand
12 permits for deepening the channels in LA and Long
13 Beach Ports to accept larger vessels is being held
14 up right now due to an issue of where the dredge
15 materials and spoils are to be disposed.

16 State agencies that adopt rules, should
17 be required to include an evaluation of the rules
18 permitting needs in concert with local agencies.
19 Someone raised that very good point this morning
20 about the impact of many local agencies on the
21 permit process.

22 The responsibilities of each level of
23 government in the permit process should be
24 expedited so that hopefully we can improve the
25 permitting process over all.

1 We should also add a provision requiring
2 state and local agencies to evaluate the impact on
3 the supply of energy and fuels before adopting any
4 more rules.

5 The agencies would also be required to
6 consult with the CEC on this aspect of their rule
7 making and to identify ways to minimize the
8 impact. The cost of any impact should be included
9 in the rule.

10 The State should obtain a federal
11 oxygenate waiver for California. I think we all
12 know how important that is and how hard people
13 have tried. It may be worth trying again.
14 Providing Title V operating permits relief would
15 be helpful.

16 The State should also limit the
17 frequency of fuel specification changes and
18 uniqueness of formulations relative to other
19 markets.

20 We are an island, and we are in some
21 isolation because of the uniqueness of our fuel
22 blend.

23 We should expand the availability of NLX
24 credits. Our agencies need to produce consistent,
25 environmental justice guidelines and an equitable

1 implementation process, and finally the CEC should
2 continue its role in monitoring the supply and
3 price of California petroleum products to help the
4 governor and legislature with accurate
5 information.

6 I have one brief request of the
7 Commission, and that is, results from several of
8 the studies that our subject to written comment
9 have come in just the last week, the last three
10 days for several of them, and at WSPA we would
11 like to ask if you could extend that deadline
12 beyond May 5, which is I believe the current
13 deadline. It has just been impossible to read the
14 hundreds of pages and provide you with effective
15 comment in such a short period of time.

16 Some final thoughts, the State
17 Government of California has reviewed gasoline
18 reserve concepts three times in the past, as I
19 understand it, and has found each time that a
20 reserve was economically unjustified, inefficient,
21 and not in the best interest of consumers.

22 We believe the current proposal is a bad
23 idea, it will not improve a fundamental market
24 constraint, which is insufficient production
25 capacity, supply to meet ever growing demand.

1 I think when you look at the totality of
2 the problem, that is a free market. It is a
3 fundamental free market situation. We have an
4 ever growing supply, and we have a system that
5 continues to constrain an every growing demand in
6 a system that continues to constrain ways in which
7 we can create supply from private industry to meet
8 that demand.

9 At the end of the day, I think that
10 spells a difficulty that we are all going to have
11 to deal with. Thank you for your time.

12 PRESIDING MEMBER BOYD: Thank you. I
13 know you know, Joe, so I won't say too much. A
14 couple of reactions, though, this is the first
15 time in any public hearing meeting or what have
16 you that I've been present at that your industry
17 has finally said you need more capacity. I just
18 want you to know that because you are the new guy
19 on the block.

20 Two years ago in WSPA's own issues
21 conference, I threw the challenge out to the
22 entire industry that if you think there is a
23 pending crisis and you think refining capacity has
24 anything to do with it, please come and talk to us
25 about it.

1 I mean, we were just then addressing an
2 electricity crisis and we had designed all kinds
3 of streamlined processes to deal with it, and the
4 silence has been deafening. I'm glad there is
5 finally a public admission that maybe there is
6 something to do with that.

7 MR. SPARANO: The admission was, I think
8 I said, in an ever growing demand scenario, where
9 there are lots of constraints against increasing
10 supply, we ought to do something about that.
11 Whether or not the individual members elect to
12 invest based on their perception of what the risk
13 may be is a whole different issue, as we both
14 know, just to clarify.

15 PRESIDING MEMBER BOYD: I guess another
16 just an observation, I think we all, at least
17 speaking for myself, we all recognize markets and
18 price spikes and the public has a tough time
19 comprehending that, and you know, we have talked a
20 little bit with the association informally about
21 if there are ways at least to dampen the peaks,
22 the valleys will get cut too, so they won't see it
23 perhaps as cheap, but my earlier comment about the
24 public's reaction, I've been through this too many
25 times, and we all spend an awful lot of time

1 trying to explain and trying to investigate and
2 analyze, and it would be better to move the ball
3 down the field, but the public does have a little
4 bit of difficulty right now understanding the
5 roughly \$.50 incremental difference between, you
6 know, what the rest of the nation has done and
7 what has happened here in California. It is up to
8 us to try to explain that to the governor and the
9 governor to the public, and we look forward to you
10 helping us do that.

11 Lastly, I appreciate your offer about
12 data because our two organizations are having lots
13 of discussions about what kind of data you need
14 and when you need it in order to do just as you
15 said, explain to the executive and legislative
16 branches what is going on in order to quell the
17 concerns and the concerns of their constituents,
18 so we look forward to continuing that work which I
19 think started out a couple of weeks ago on a very
20 good foot.

21 As for the rest of it, join us tomorrow
22 for a continuing discussion and then the ball is
23 in our court to try to make some tough decisions
24 and recommendations. Thank you.

25 (Whereupon, at 6:04 p.m., the workshop

1 was adjourned, to reconvene at 10:00
2 a.m., Friday, April 25, 2003, at this
3 same location.)

4 --oOo--

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I, PETER PETTY, an Electronic Reporter,
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